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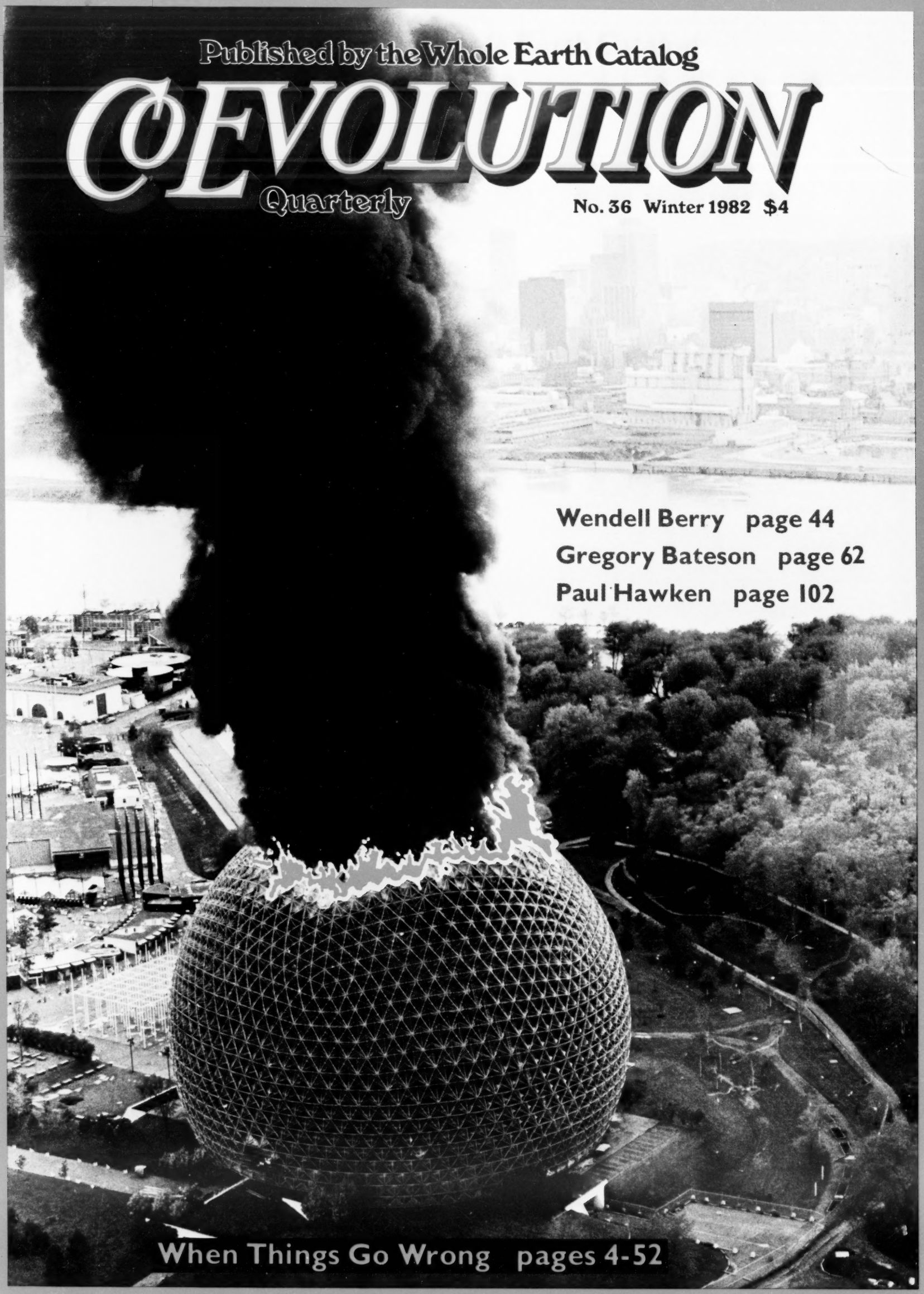

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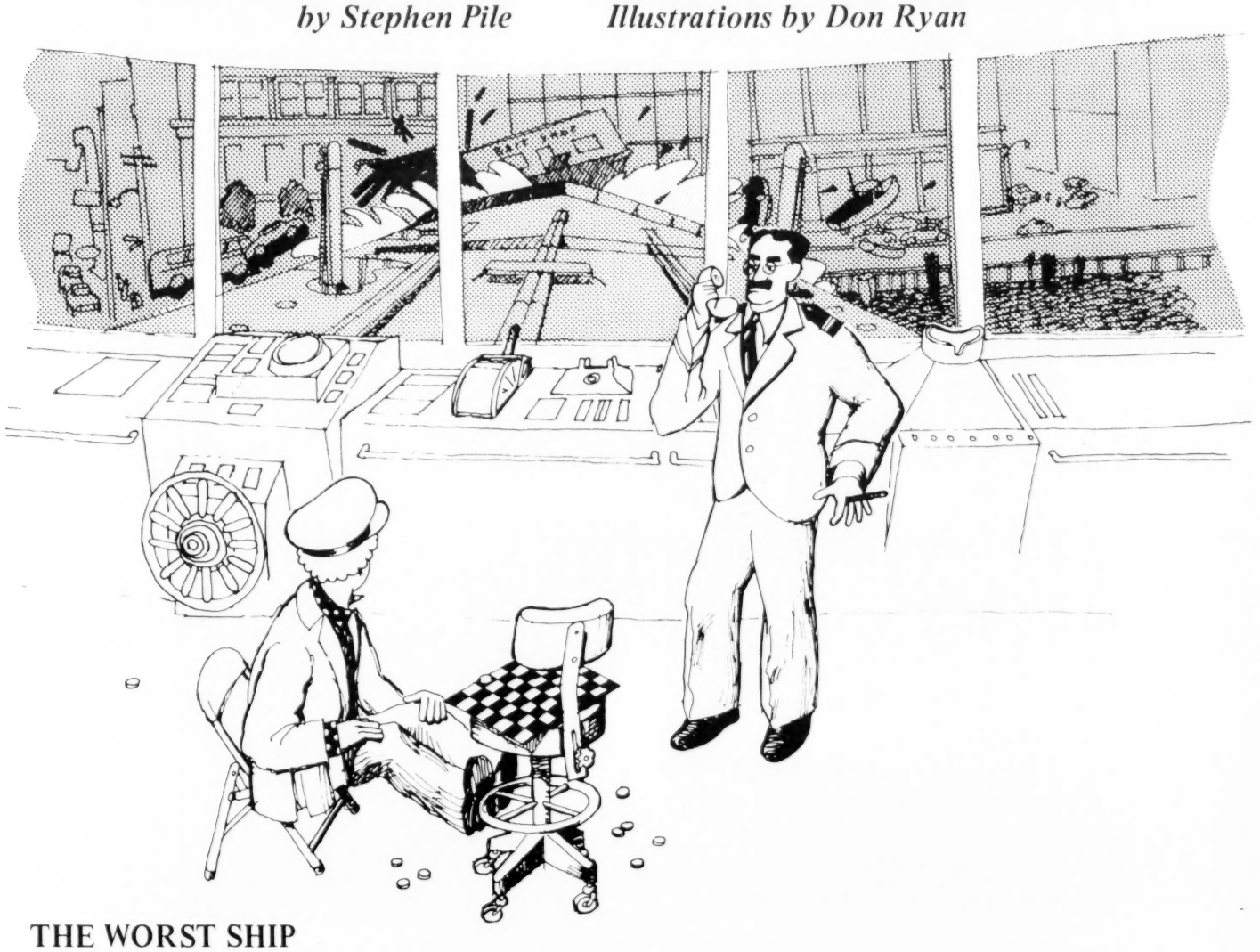
Selections from 'The Incomplete Book of Failures'

by Stephen Pile *Illustrations by Don Ryan*



THE WORST SHIP

Between 1953, when it was built, and 1976, when it sank, the *Argo Merchant* suffered every known form of maritime disaster.

In 1967 the ship took eight months to sail from Japan to America. It collided with a Japanese ship, caught fire three times, and had to stop for repairs five times.

In 1968 there was a mutiny and in 1969 she went aground off Borneo for 34 hours. In the next five years she was laid up in Curacao, grounded off Sicily, and towed to New York.

In 1976 her boilers broke down six times and she once had to travel with two red lights displayed, indicating that the crew could no longer control the ship's movements because steering and engine had failed. She was banned from Philadelphia, Boston, and the Panama Canal.

To round off a perfect year she ran aground and sank off Cape Cod, depositing the country's largest oil slick on the doorstep of Massachusetts.

At the time of the final grounding, the ship had been 'lost' for 15 hours. The crew was 18 miles off course and navigating by the stars, because modern equipment had broken down. What is more, the West Indian helmsman could not read the Greek handwriting showing the course to be steered.

A naval expert afterwards described the ship as 'a disaster looking for somewhere to happen.'

THE ART OF BEING WRONG

a. "Heaven and Earth were created all together in the same instant, on October 23, 4004 B.C., at nine o'clock in the morning." –Dr. John Lightfoot, Vice Chancellor of Cambridge University.

b. "Far too noisy, my dear Mozart. Far too many notes." –The Emperor Ferdinand after the first performance of *The Marriage of Figaro*.

c. "Rembrandt is not to be compared in the painting of character with our extraordinarily gifted English artist, Mr. Rippingille." –John Hunt.

d. "They couldn't hit an elephant at this dist . . ." –The last words of General John Sedgwick, spoken while looking over the parapet at enemy lines during the Battle of Spotsylvania.

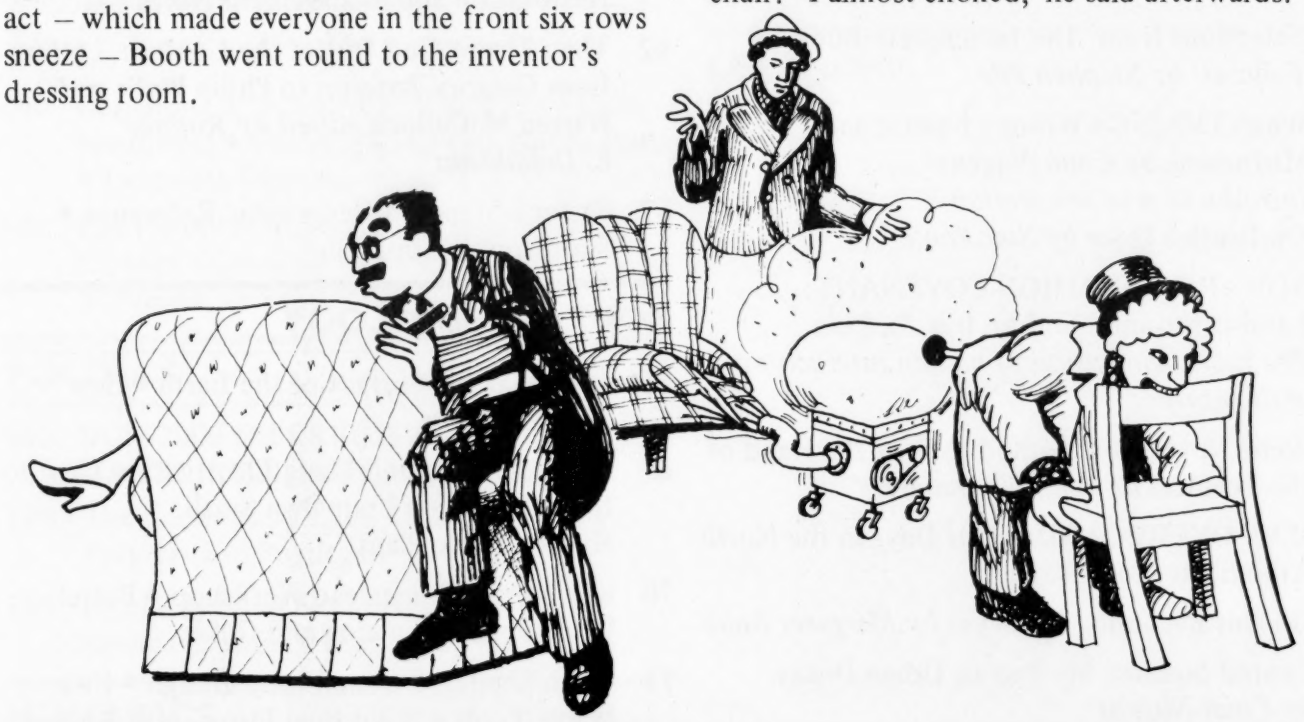
THE MAN WHO ALMOST INVENTED THE VACUUM CLEANER

The man officially credited with inventing the vacuum cleaner is Hubert Cecil Booth. However, he got the idea from a man who almost invented it.

In 1901 Booth visited a London music hall. On the bill was an American inventor with his wonder machine for removing dust from carpets.

The machine comprised a box about one foot square with a bag on top. After watching the act – which made everyone in the front six rows sneeze – Booth went round to the inventor's dressing room.

'It should suck not blow,' said Booth, coming straight to the point. 'Suck?' exclaimed the enraged inventor. 'Your machine just moves the dust around the room,' Booth informed him. 'Suck? Suck? Sucking is not possible,' was the inventor's reply and he stormed out. Booth proved that it was by the simple expedient of kneeling down, pursing his lips and sucking the back of an armchair. 'I almost choked,' he said afterwards.

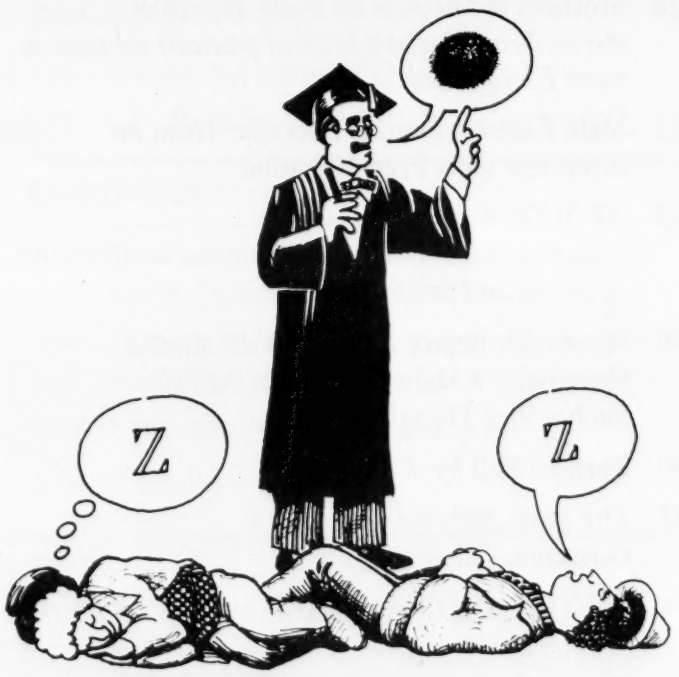


THE MOST INACCURATE VALUE OF PI

In 1897, the General Assembly of Indiana passed a bill ruling that the value of Pi was four.

THE MOST BORING LECTURE

One of the most boring lecturers in the civilized world is certainly Dr. David Coward of Leeds University. He won the 'Boring Lecturer of the Year' contest, held annually at Leeds, two years running. Lecturers nominate themselves and may speak on any subject. Dr. Coward, a lecturer in the French Department, set the record in 1977 with a delightfully dull talk on 'The problem of the manned urinal.' In winning, he fended off such slight opposition as a man who fell asleep during his third sentence amidst boos and catcalls, and a member of the medical faculty whose lecture 'How to tell right from left' was repeatedly illustrated by slides of a billiard ball viewed from different angles.



The previous year Dr. Coward had won with a Marxist explanation of a joke about coconuts. 'It wasn't a terribly good joke,' he said, 'but after I had explained it for 20 minutes people began to see its latent merits.' He retired from the competition undefeated.

These selections from what is also called "The Official Handbook of the Not-Terribly-Good Club of Great Britain" are copyrighted 1979 by Stephen Pile and reprinted by permission of the publisher, E.P. Dutton. You can get the whole book for $5.95 postpaid from Dutton at Two Park Avenue, New York, NY 10016. –Art Kleiner

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COVERS

It was 1976. The dome had been a monument of the "New Age" since 1966, when it was designed and built by Buckminster Fuller for Montreal's Expo 67. A welder was repairing the dome's air conditioning and heating system. Every now and then his torch would accidentally set the dome's acrylic skin on fire, but it was no big deal because he'd just put it out with his chemical fire extinguisher. Toward the end of the day his fire extinguisher ran out. Still no problem, he thought; he'd just finish up the one or two last welding shots before quitting . . . .

The cover illustrates "When Things Go Wrong," a special **CQ** *section on failure and misfortune. The photo, snapped by Montreal aerial photographer Doug Lehmann, was unearthed by section editor Conn Nugent, who has seen a lot of failure and misfortune as administrator of the Vingo Trust, an urban community foundation in Cambridge, Massachusetts. Conn assembled just about everything through page 52.*

The back cover's painting started as a watercolor sketch by Kathleen O'Neill to help figure out the appropriate design for a sign for our new **CQ** *storefront, described on page 142. The sketch looked inviting enough that we asked her to adapt it as a back-cover watercolor welcome for you. Come to 27 Gate Five Road in Sausalito, if you like, and compare her vision to yours.* —*Art Kleiner*

WHEN THINGS GO WRONG

FAILURE AND MISFORTUNE

The idea behind the next 49 pages has been to fashion a small mosaic of adversities. Sometimes lessons are made explicit by the authors; other times you'll have to work for them.

When we talk about failure or misfortune, we are basically describing human judgments, born of our natural tendency to make distinctions. The more we say that something is different from other things, the more we think of it in terms of failure and misfortune (or success and good luck, for that matter). Predictably, I guess, this tendency to subdivide and to be dissatisfied spawns its opposite: all of us strike a balance in our lives between notions of improvement and love of the indivisible.

In this section, we've presented a variety of difficulties that reveal some of the needs and possibilities for both change and acceptance. Some of the adversities are slight, easily converted to success. Others are deep and social, requiring hard work to turn them around. We hope they're all of interest.

—Conn Nugent, guest editor,
on behalf of my coeditor, David Gancher,
and the writers and readers who contributed care and effort to this little enterprise.
Thanks to them all.

WEN-TI TSEN

ON DEATH'S DOOR

by Star Poole

ONCE I FOUND a lump in my breast and thought I had cancer. While waiting for the results of a mammeograph I decided I might not have long to live. I have to take risks, I thought. I'll take the slipcovers off the chairs and stop saving the best china. I must see Paris. I'll even go to a singles bar, I resolved, checking the newspaper for listings. There's not much time left, and I won't be around to be embarrassed if my adventures are disastrous. And now I can quit my boring job and write a novel – **The Last Days**. It's almost worth dying just to get out of the rut!

I was feeling a little better. Never again would I type a grant proposal and reverify the spelling of words I'd known perfectly until being brainwashed with the errors of others. As for what they were paying me, it hadn't even been fair compensation for having to look at that decal of the Smiling Face merged into the woodwork above my station.

I reserved a first class seat on a flight to Paris and was about to phone the office with my resignation when the doctor's secretary called. It seemed there was no sign of malignancy . . . she was sure I'd be relieved.

Slowly I put down the phone. Sadly I went and dug out the slipcovers and replaced them on the chairs. I put the best dishes back in the china cabinet and tossed the singles bars listings into the garbage and thought what a letdown it was to feel safe again.

Dialing the airline, I was almost in tears. I remembered the Smiling Face as I cancelled my first class ticket.

Then I decided to travel coach. ■

Star Poole lives in Cambridgeport, Massachusetts, a few blocks from my office. She walked in one day and dropped off this small jewel.
—Conn Nugent

TOWARD A COMMON COVENANT

LANDSCAPES AND MIND

by Wes Jackson, drawings by Michael Moore

AS I UNDERSTAND it, Conn Nugent volunteered for the job of editing this section as a result of his criticism of the issue devoted to bioregionalism.* Though he emphasized that centralization has virtues which deserve a hearing, it seems to me that what really set him off is what he called the "cheery optimism" of many of those who extol the virtues of bioregionalism. As I made my way through his letter, I began to nod in agreement, for what he had to say brought to mind that well-known verse from Ecclesiastes:

I returned and saw under the sun, that the race is not to the swift, nor the battle to the strong, neither yet bread to the wise, nor yet riches to men of understanding, nor yet favour to men of skill; but time and chance happeneth to them all.

*See "Bioregional Exchange," **CQ** Summer 1982, p. 47.

I have always suspected that this scripture must have been canonized when religious thinkers saw a need for a counterbalance, lest we become too smug about our ideas for what it takes to "win" in this "world of tears." Maybe they wanted to remind us that winning is not what it is all about. Whatever the reason or reasons, those 49 words sit us down hard, which is what I think Conn Nugent wants this section to do. Even though the "cheery optimism" set him off, I doubt that he believes we need a debate over whether we should be optimistic or pessimistic about what's going on now and what lies in store for the future. There is no end to that one. And though I fall on the side of the decentralists, I don't believe that decentralism or bioregionalism is what we need to talk about as a people.

I believe Earth has a problem primarily because we have a problem with our very nature and no common covenant for governing or coping with it. The

---

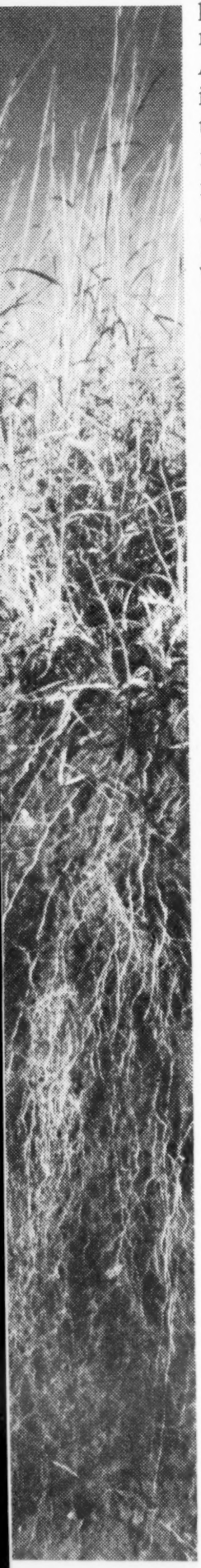
Failure and misfortune differ on the question of responsibility: failure denotes preventability and misfortune denotes fate. And, of course, they like to travel together: a negative event is often some combination of bad luck and our own damn bungling.

Distinguishing failure from misfortune, blameless error from sin, is an evolutionary cultural task, and it's one of the jobs that Wes Jackson has undertaken here. Ancient peoples thought that floods and droughts, for instance, were their fault; they had displeased the gods. Then we thought that floods and droughts weren't our fault, but that we couldn't do much about them. Then we thought that they weren't our fault, but that we could take some counter-measures. And now we're coming to learn that a lot of floods and droughts are our fault. In the next few pages, Wes takes this most difficult case – the moral dimension of human interactions with nature – and suggests both diagnoses and remedies. It's a real feat.

Wes lives on the Great Plains, in Salina, Kansas, where he and his wife Dana run The Land Institute. Among other useful things, The Land experiments with perennial, food-producing grasses, an approach promoted in Wes's book **New Roots for Agriculture** *(**NWEC** p. 76). He is a notable plant geneticist and a compelling ecological patriot. –Conn Nugent*

problem for the Earth is that we have an unspecialized and versatile ability to meet some rather specialized demands.

For example, most of humanity depends on a few annual grass species grown in monoculture for most of its food. In most cases, the nature we have destroyed to grow food was more generalized than what we've replaced it with. This versatile ability to homogenize environments comes from our experiences in numerous bioregions over time, experiences our bodies and minds still remember. The African savannas applied some of the last and most important touches to this being of ours, but before the savanna experience there was the forest, a forest so old it has been left for our bodies to remember what our brains never knew. That's not completely true, of course, but we can observe some of this body memory every day of our life. We might observe it, for example, when we place a ten-penny nail to the surface of a two-by-four, when one of our freely-articulating shoulders, derived from the forest, allows us to hold that nail high over our heads with one hand until the first tap with the hammer. With the other shoulder now in ratchet motion, the arm drives the nail home. The hammer is held by a clasping hand, first shaped to grasp limbs and, only later, stone tools and weapons. The forest which gave us that fine shoulder, and much of the hand, is the same forest which perfected our stereoscopic vision, the depth perception which grants us the justifiable confidence to hit that small nail and drive it all the way with a few solid strokes. It scarcely matters why it is so satisfying to sink a nail which drives straight and true. But it *does* feel *so* right; I doubt that any other species could experience such satisfaction.



Erosion held by a 30-foot deep web of prairie grass roots; the ignorant sinner overgrazes or removes the grass.

DESIRE AND ENGINEERING

The satisfaction I have just described is part of a much larger matrix, a substrate with potential for both good and evil. The evil first appears when that part of our human nature, whether armed with the extra-human energy of an ox or a nuclear reactor or anything in between, threatens to reduce the earth's biological capital in order to *create* artificial environments specialized beyond necessity. Real trouble begins when the memories of our bodies and minds become our *desires*. It happens so unwittingly. To drive the nail straight and true and feel good about it is innocent enough. Your desires may be still adequately in check when your body lies awake at night tantalizing your mind, which in turn sees itself moving the body to take the pickup on Saturday morning to the lumberyard to buy two-by-fours, and a string level and

bags of Portland cement and some sand and some nails and anything else necessary to start the ten-foot porch addition at the back. It all adds to our comfort and the household does benefit. So far, so good. But when more bodies and more minds, some trained as architects, some as engineers, see themselves building one more shopping center over one more wheat field, *then* we wish our planning commission had a "bioregional point of view."

We all want to do something to satiate *desire* which in most cases goes far beyond need. Much that is responsible for these insatiable desires is derived from our experiences in countless bioregions of the past. It seems to me that *this* component of our original sin was born out of necessity. What is at work is obedience to the appetites of a body and mind shaped in a past in which there was no opportunity for a gluttonous consumption of resources or the fouling of the environment beyond redemption.

So we operate like educators in the faith that more knowledge will solve our problems. "Increase the volume of education," we say. But results are not guaranteed by simply increasing the *volume* of education without attending to content as well, as Aldo Leopold suggested over 30 years ago. Leopold thought we needed additional content to change our loyalties and affections. It is this we need to keep in mind in our search, for it forces us to confront the basic question of how much humans should try to improve on nature.

It's an old question really, and thinkers through the ages have devoted lots of time to the issue. It goes way back, even before Moses delivered the law. Yahweh advanced his instructions that an altar was to be built, of unhewn stone, with the warning that the stone was not to be polluted by any tool. If the word *polluted* were not in the instructions, one might conclude that Yahweh wanted praise and he wanted it quick. Instead, we are forced to consider whether Yahweh is telling us that his creation is good enough, that to modify his materials is to reduce their value. Or was old jealous Yahweh simply worried that human cleverness and dexterity with a tool might shape a handiwork so dazzling that all who looked upon it

would be more mindful of the artisan than the the creator?

As an ecological preservationist, I have been tempted to cite this scripture to support the argument that to alter the original material is to neglect its larger purpose in the scheme of things. It is a tough problem. Would not even the most ardent rock hound quickly concede that the original chunk of marble that Michelangelo circled and studied for cracks was not nearly so grand as the finished *David*? The greatest wisdom has always been required to judge whether nature acting alone can meet our needs or whether our cleverness and effort are required. Tampering with the environment is a serious matter. Animal and plant species improve their environments by reordering their surroundings. Birds build nests. Prairie dogs make tunnels. Plants change the shading pattern and in many cases exude chemicals from their roots which are toxic to their competitors. Ultimately, the question must relate to the *time necessary for recovery* after an environment has been overly modified.

Yahweh had a problem, for, as I have suggested earlier, the human impulse to create has had too much survival leverage in our gathering-hunting past. One can't expect this psycho-biological drive to be easily overriden, even when the orders are from above and explicit.

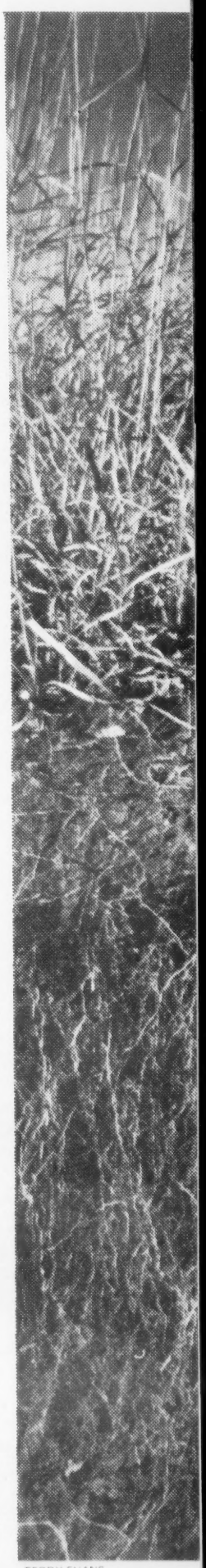
FRAGMENTED VISIONS

With this as background, consider the recent mania among scientists to alter or rearrange DNA of numerous species to serve human *needs* and *desires*. Frankly, I am not concerned about some "cut loose" genes from one species causing a recipient plant to run wild when "stitched-in" by some clever biochemist. I won't be surprised if we eventually find human genes in most of our domestic crops, genes which long ago were surgically removed by viruses and carried to the DNA of a crop plant and finally stitched in with the aid of the viral surgeon. Such plants would have a selective advantage over their noninfected neighbors. Such *co*evolution may have been going on for ten to twenty thousand years.

My bet is that nothing fundamentally new, biologically, is actually underway. The problem with DNA surgery, gene splicing, genetic stitching, or whatever, is not that it might possibly upset the balance of nature, but that it will almost certainly further upset whatever is left of the balance of the human. What is being proposed by the splicers and stitchers and surgeons of DNA won't hurt us because it is new but rather because it is painfully old. It is once more an emphasis on cleverness which is motivated by the desire for a "breakthrough." What follows a "breakthrough" may best be characterized as a spasm. The likes of the **Wall Street Journal**, **New York Times**, **Washington Post** and **San Francisco Chronicle** will devote several column inches to it. The scientific "sprinters" who brought it about will suddenly be invited to more parties than they can possibly attend.

What if some clever biochemists do manage a "breakthrough" so that sunflowers and grasses fix nitrogen as actively as certain legumes so that we can momentarily keep the famines from trimming the human population in a part of the world where crowding is already terrible? Even a casual study of the history of science and technology forces us to admit that in most cases, the solution of one problem contributes to the creation of more problems. I am not talking about the old saw that more people surviving means that more people breed, upping the ante one more time. I am talking about the arrogance which attends our seeing the world in parts rather than whole. A recent example of what can happen is the fever following the discovery of interferon, that substance thought to be one of our body's best natural defenses against viral infections. Millions were spent by companies to manufacture the substance through DNA transfer and the like before it was discovered that interferon actually increases the damage done by other viruses in mice. They may get the entire problem solved eventually, but how far and how extensively is it appropriate for us to noodle around in the nucleus? As much as we want and can? Most people seem to think so, but we can guess what old Yahweh would say.

Only the fool or the complete nihilist would have anything to do with a proposal to stop all art and science. As I see it, our problem is that we lack a common covenant and a common vision to guide us. So our scientists, with few exceptions, are free to do what is possible. The people Moses ordered



TERRY EVANS

Usually we think of atoning for our sins, for the evil we do on purpose. We have to think too about atoning for our *errors*.

around lived under a common covenant and had a clear idea of where they were going and why. Moses had plenty of trouble on his hands even so. (Incidentally, centuries later, that covenant was still very powerful when David, Israel's second king, got completely out of line by bringing Bathsheba into his palace, impregnating her, and having her husband killed in battle. What David had done was quickly recognized as unacceptable. Nathan the Prophet appeared and told him a parable. When David became outraged about the injustice done in the story, Nathan quickly put the finger on David by saying, "Thou art the man." Because they lived under a common covenant, the prophet made it stick. King David repented and suffered a terrible consequence – the love child died.)

AWARENESS AND PENANCE

I will come back to the idea of a common covenant later, for it ties in with another religious idea, the idea of atonement. The Hebrew idea of atonement isn't taken very seriously by very many people any more, even though the featured animal, the scapegoat, is frequently mentioned. The scapegoat was the animal upon whose forehead the sins of the people were recited before it was set free to wander about in the wilderness. Actually, there are two goats associated with atonement. One is sacrificed and symbolizes the forgiveness of the people's sins. It seems possible that the living goat wandered from the wilderness back to the human habitat every now and then, into the view of the people, providing them with the occasional reminder that their sins, though forgiven, live on, or at least that the consequences of sin live on. Even if they never saw that goat again, they lived with the knowledge that it wandered the wilderness alive, bearing their sins.

But we can't talk about atonement unless we talk about what we are atoning for. Usually we think of atoning for our sins, for the evil we do on purpose. We have to think too about atoning for our *errors* – a cropping system which leads to terrible erosion, for example. The distinction between evil and error is not always clear, and this isn't the place to explore the distinction. What is important is that error is likely to require as much effort for rectification as evil. Redemption can follow either, for redemption is an ecological reality (which, by the way, very early must have become a religious notion). Whether ignorance or greed leads to overgrazing of a hillside, the result is the same. The hillside can be redeemed, probably not completely, probably not very soon, but eventually and to some degree.

Whether for our sins or our mistakes, we need a kind of ecological atonement, but no parallels for either of the two goats come to mind. One reason is that this Hebrew ritual of atonement involves sins committed on purpose, with a consciousness that everything they had confessed was wrong. Many, if not most, of our sins against the land and its community are unconscious. We're not even aware that some of our acts result from a brand of arrogance.

We have an additional problem: when we try to correct our mistakes, we almost inevitably make more. And as we compound our errors, as Conn Nugent says, we should acknowledge those events or technologies which have been responsible. Some are outright failures. It would be convenient if we had an animal's forehead on which to recite our errors, along with or sins; ecological goats to wander in and out of our lives.

We might feel silly engaging in rituals which involve goats, living or dead, but there is nothing frivolous about the value of atonement or the need for a common covenant. A common covenant can unite a people around appropriate "loyalties and affections" and affirm their efforts to develop a healthy relationship among themselves and between them and Nature. A sustainable agriculture will require both, for without both, essays on bioregionalism will be little more than lessons in geography and natural history.

What if we employed our rivers and creeks in some ritual of atonement? Their sediment load is largely the result of our agricultural practices based upon arrogance, tied in turn to an economic system based upon arrogance. Much of that sediment load results from ignorance and error but too much more is the consequence of deliberate evil. I can't visualize what it would look like, but perhaps we need an annual formal observance in the spring – when the rivers are particularly muddy – a kind of ecological atonement, where we "gather at the river." Maybe we should ally ourselves by virtue of a common watershed, rather than a common ecosystem or bioregion. It is an important distinction, for a watershed can and often does cut through more than one bioregion. There would be nothing abstract about a common covenant among people of a common watershed. A cattle crossing a mile upstream from a town's water supply affects the amount of chlorine people will be forced to drink. A stream has the potential of being as unifying as

the covenant shared by King David and Prophet Nathan.

A stream is a powerful image, too. It unites every square foot of its watershed. People of a common watershed, committed to a sustainable agriculture, must above all else recognize their future and that of their descendents in every square foot of that watershed. Anyone interested in maintaining the quantity of nutrients and the quality or health of a soil can judge the relative success or failure of that ideal in the river. Such a judgment will not suit the simple-minded, for rivers will always carry some sediment. They always have. Banks will slip, a river will cut. Rivers will continue to do what they did before agriculture, before humans. The Missouri was called "Big Muddy" before the prairies were plowed, a matter of possible confusion to those untutored by the river. But it is essential to realize, as a minor detail, that the sediment load before agriculture could not have exceeded what was created by the normal lowering of the riverbed, and what was carved from the interior highlands.

It is even more important to appreciate that the amount of soil from the prairie which wound up in the river could not have exceeded what the prairie plant roots were extracting from parent rock or subsoil. Otherwise there would have been no soil over much of the watershed. What should concern us is this extra load running in the river today, the fertility, the nutrients hard-earned by Nature's myriad of life forms which broke them free of their rocky prisons over the course of millennia, bathed them with chemicals and made them fit for that freedom known only in the biota. The solar energy cost of mining these nutrients with root pumps is characterized by a slow pay-back period, an energy cost which only geologic time can justify. Root pumping is a form of mining, but roots also *retain* most of what they've mined. Our major sin as white occupiers of this continent, a sin which ranks with our enslavement of the African and our systematic genocide of the native, is the violence we've done to that *land community*, the only assured guardian against the seaward flush of hard-earned soil to a watery grave.

WATER

When we think about water very extensively, we are forced to think globally. Someone worked it out once that every molecule of water at one time or other has been positioned on or above every square foot of earth. Moreover, water anywhere, but perhaps most particularly running in a river, can remind us what a special place Earth is. Consider the fact that liquid water is comparatively rare in outer space where temperatures range from near absolute zero to the unimaginable heat in the cores of younger stars. We take liquid water for granted, a conceit by galactic standards, for under our atmospheric pressure it exists aplenty within the extremely narrow temperature range of 180° – between 32°F. and 212° F. Everywhere else in the universe, where water exists at all, it must be mostly either as solid ice or a vapor. Its liquid properties even for our own solar system, let alone this part of the sidereal universe and beyond, are extraordinary.

But just because water is a liquid here on planet Earth, we are not home free. We are land animals, and water's behavior on land affects us. On land, water has the potential to be either a life-nurturing source or a primary eroding force. Water, more than any of our other necessities, most dramatically promotes or erodes human options. What if we, as a people, would actually visualize the journey of a water molecule in a raindrop from the time the atmosphere loses its grip, setting it loose for a journey through the biota, until it returns to one of its more permanent homes, the ocean or the atmosphere? We would soon become aware that the necessary traps and gates neatly evolved to stall and shunt the itinerant water molecules are the most elaborate in nature's ecosystems.

This is what those of a watershed must know and understand if they "gather at the river." With practice, we can learn to read the signs as to what constitutes a *tolerable* rate of sediment loss. When we see a load beyond this tolerable rate, we realize that the consequences of the sins of the people (maybe all our sins if we take it far enough) have literally been cast out upon the waters where all can see. In a way, the river is our living goat. In another way, the river is better than a sin-ridden goat, for it will respond when we are doing better, revealing our improvement almost daily by the increasing clarity with which it runs.

Our sins against the land on behalf of agriculture alone are partly the consequence of power far beyond the length and breadth of any one watershed. Export policy is tied to balance of payment

Even though many of the sins against the land now stretch beyond the control of the individual or the boundaries of the watershed, the watershed still has the potential to unify.

considerations to purchase foreign oil for an energy-wasting society. The institutional structure of American agriculture tempts farmers to over-capitalize, to bulldoze out Roosevelt-era shelter-belts, to plow fence row to fence row, to break out marginal land which had been kept in grass. Even though many of the sins against the land now stretch beyond the control of the individual or the boundaries of the watershed, the watershed still has the potential to unify. The river will always speak to an advancing tyro, diligently studying his sign language, a language in every way local, in every way universal, but in no way foreign.

Yahweh's people had just shaken the paradigm of slavery and were thinking through another when he handed down what must have seemed like a peculiar instruction – to make an altar of unhewn stone. We know that in other lands, in ancient times before Yahweh had been named, sacred groves were set aside by others who had concerned themselves with the destruction of an Asian countryside, and even though we recognize the paradox that many of those groves were cut by the faithful to build temples, we cannot imagine how bad it would have been without those trees as reminders. If a "voice" were to give ecological instructions to prairie people on how to partially atone for our sins and errors, I imagine it would say:

> Return as much of your land *as you can afford* to diverse native prairie. Do not add improved varieties in which the tools of technology have been applied, lest thou pollute the landscape. Do not try to improve on it. From this will come your standard against which you judge your agricultural practices. There is nothing above the land and its natural community.

I thank Wendell Berry, Neddie S. Jackson, and Tevere MacFadyen, who helped me clarify various points in this article. That which is not clear is due either to my own stubborness or ineptness in following instructions. ■

FAIRCHILD AERIAL SURVEYS IN FEININGER'S THE ANATOMY OF NATURE

Colorado River estuaries from the air: basis for a covenant.

SOME NOTES ON A METHOD TO STAY THE HAND OF THE TORTURER

by John Newmeyer

The key element in this strategy is to obtain the names and addresses of known torturers, and to make these people acutely aware that the eyes of the world are upon them, and that they will be held individually answerable for their crimes for the rest of their lives.

As soon as certain knowledge of an individual torturer is obtained, a registered letter should be sent to this person at his home address. This letter should contain the following elements:

- We know who you are, where you live, who's in your family, and what your crimes have been.
- We will keep these data in the master files in the U.S.A., Sweden, Japan, and a secret fourth location. We aim to use all the technology at our disposal to keep track of known torturers.
- We believe that when a regime of torturers is finally overthrown, the new government should be assisted in tracking down the torturers and exacting the people's retribution, as was done in Iran in 1980. Torture is a crime that must never be forgotten or forgiven.

The letter should go on to describe the possible courses of action for the accused torturer:

- *Immediately* resolve to cease participating in this evil practice.
- Notify your superiors that the action they require of you is in violation of (cite relevant international law) and (cite appropriate religious principles). If this seems an undesirable course to you, notify us of these superiors' names and addresses, and we will take the appropriate action.
- If you cannot defy your superiors, then simply refuse to perform the actual act of torture.
- If you cannot do this, then contact (name appropriate religious authority) for support.
- If you cannot do any of these things, then consider fleeing your regime. We will do all we can to assist any repentant torturer.

The letter should not neglect to mention the steps that will be taken:

- Your name is presently (cite date) in our temporary files.
- Your name will be entered in our permanent files if we are aware of the reprehensible behavior continuing after (cite date 30 days later).
- Our files will be retained for 80 years.
- Upon a change of regime to one not sympathetic to the current torture-regime, your name will immediately be turned over to the new authorities. We will be diligent in seeing that the people's retribution is exacted.
- A copy of this letter is being sent to your relatives (names) who will henceforth be held responsible as a party to your crimes. ■

MADNESS NETWORK NEWS READER

John Newmeyer, a member of Amnesty International, was the unsuccessful Democratic candidate for U.S. Congress in Napa and Sonoma, California, this fall. This is a sincere proposal, published here first. —Art Kleiner

Rory Nugent is my brother and an accomplished sailor. After his first transatlantic passage at age 21, he knew that his life was with the sea. His specialty is singlehanded ocean racing, a calling fierce enough to dispel the image "of another expensively educated kid looking for contradictions." In 1976, when he was 23, he sailed a trimaran of his own construction to a creditable finish in the Observer Singlehanded Transatlantic Race (OSTAR), despite a dismasting that forced him to lay over in the Azores. Four years later, this time in a boat he built named Godiva (after the chocolate makers who ponied up cash), he set sail for England and another try at OSTAR. Godiva never made it, as his story explains.

It may bear noting that Rory is not rich, or even moderately well-off. In fact, he's poor. All money goes to the next boat he will build, toward the next prize. Many North American OSTAR competitors shipped their boats to England. Rory couldn't afford to, and so embarked on this incredible voyage.

—Conn Nugent

MAN OVERBOARD

FOUR DAYS IN THE NORTH ATLANTIC

by Rory Nugent
Drawing by Jan Adkins

ON MAY 17, 1980, the 28th anniversary of his baptism, Rory Nugent was alone on a 32-foot racing sailboat, eight days out of Martha's Vineyard, due for England and the starting line of the Singlehanded Transatlantic Race. By his estimate, he was halfway to Europe, atop the Midatlantic Ridge, 15 miles from that exact spot in the North Atlantic most remote from land. It was night.

The boat he sailed was radical in design and construction. Nugent called it a proa, in homage to its Polynesian inspiration. But it was really a contemporary, experimental craft, built from exotic polymers and alloys. It was designed to sail the oceans faster than any other boat its size.

And it was, indeed, very fast. Trial runs in Vineyard Sound had demonstrated the fact. One time it had caught and passed (to leeward) a racing yacht three times its length. On that night of May 17, it had travelled 800 miles in three days. But the boat was also uncomfortable. Being a racer, Nugent accepted the inevitability that speed in a boat that size precluded ease and space. There were two four-foot bunks and 25 days' worth of equipment and supplies wedged into an interior nine feet long and three feet wide. And the draft was so shallow that Nugent could stand only when he popped his head through the hatch. No matter. This was the boat that would win.

Crammed into his cabin that night, Nugent was content. His proa had performed admirably during the heavy storm just passed, and the weather report called for clear sailing all the way to Plymouth. He smoked a Camel.

THE LAWS OF PROBABILITY explain how two waves, travelling in what marine scientists call "trains," can get "in step." And when these trains of varying speed and energy get in step for a moment, they combine to produce one wave bigger than each component. When a series of trains march, the result is a giant wave of intensely concentrated energy. Such a wave will live for several minutes as an awesome wall of water until its constituents break pace and separate. These large waves, reported by the few crews that have survived them, can reach heights in excess of 150 feet. The waves are believed to topple large freighters, and they are suspected of playing a major role in the so-called mystery of the Bermuda Triangle.

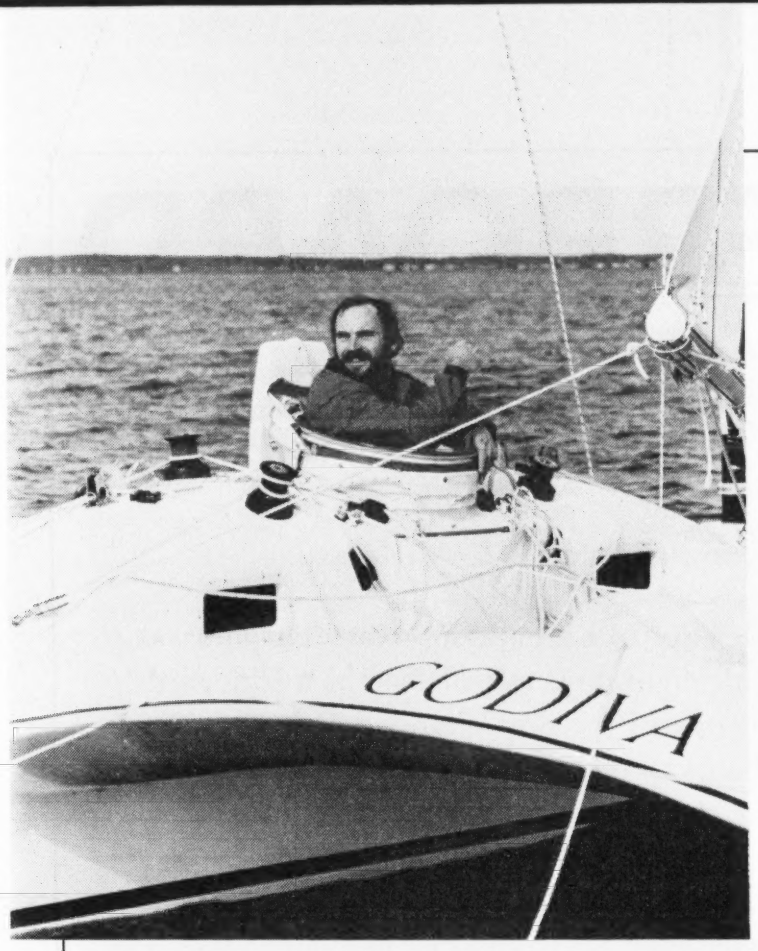
Below deck, Nugent saw no wave. But a sixth sense made him jam the helm hard to port and release the cleated sheets. He slammed the helm again and again. No effect; there was no control. Nugent cursed the sea that moments before had lulled him.

He looked leeward and saw nothing through the night. Then he glanced upward and the cursing stopped. Above him was the turgid crest of a massive wave, an ugly, rabid whitecap that towered above the 50-foot masts. It was poised to curl and drop. Nugent inhaled and braced himself.

The monster wave picked up the boat and turned it around as if it were a matchbox racer. Nugent glanced once more and then quickly shut his eyes as he tucked chin to chest, unsure if they would ever open to sunlight again. As the mass of several small inland lakes dropped 20 feet atop his head and shoulders, he shouted a farewell curse.

He was okay, or so he thought, since the experience was so utterly surreal and disorienting. Before he went below to check for damage, he noticed that the outrigger was out of the water. The boat was in the middle of a roll. Time was suspended as he watched his own boat capsize. Near-simultaneous thoughts crowded his consciousness with varied images. What seemed three hours couldn't have been more than 12 seconds. The consequences of capsize had yet to register, so he watched the outrigger arc a full 180 degrees with mouth agape and mind reeling.

Reality hit with a gulp of salt water and realization that he was submerged, with his head pointed toward the bottom. He quickly dove out of the hatch and grabbed for the netting which spanned the proa's two hulls. But the harder he pulled, the more the net tightened, forcing him all that much



ROBERT WEISS AND ASSOCIATES

Rory Nugent and Godiva's hatch

farther from air. Again he dove, but this time he dove as deep and as far as he could. He surfaced 20 yards from the drifting wreck, amazed that he was still alive and thankful that the body can perform extraordinary feats. Dazed but unhurt, he swam to the lee of the floating boat, bobbing in the dark night.

ORGANIZING FOR SURVIVAL

THE EMERGENCY STORES were stocked and placed well within his easy reach. He was prepared. He had spent hours planning for such an emergency. He had two calamity bags: one contained his life raft and an electronic emergency distress beacon, called an EPIRB, that emits both UHF and VHF emergency signals; the second bag contained food, tools, water, flares and a survival suit, a thick orange-colored oversized neoprene jump suit designed to prevent hypothermia. He reached for the second bag and donned the survival suit. He then grabbed the emergency beacon. Just as he started to catch his breath, he saw a flashlight bobbing in the water and he dove for it. He turned it on and scanned the wreckage. Gear was everywhere. He instinctively gathered everything that floated, but soon realized he needed someplace to stow it all. He dropped everything but the torch and reached for the life raft's emergency cord. The raft inflated and he secured it in the lee of the main hull, where it was both handy and protected from waves. Into it went all the flotsam: charts, flashlights, sextant, numerous green plastic bags that contained food and clothing, and – most important – the contents of his number one calamity bag, save the flare gun, four flares and 24 chocolate bars which he stashed inside his waterproof survival suit. The flares, he reasoned, should be close at hand in case a ship or plane happened nearby. The chocolate bars would help him through the night. Though he didn't realize it at the time, the placement of those items was a providential decision.

Within a half-hour everything was neatly stowed in the raft. He surprised himself with the number of things he had salvaged. As he sat astride the keel, he heard the sound of more gear trapped inside the hull as it bashed against the topsides. He contemplated what a dive into the hull's interior would be like and whether such a dive would be worth the risk. He questioned himself: Would the 22-inch-diameter hatch be clogged with debris? Would a floorboard be wedged against the battery box? How much battery acid had spilled? He calculated the odds and decided to dive.

He inhaled deeply and dove toward the hatch. When he felt that he was directly under the hatch opening, he kicked his feet. A line snagged his right leg and stopped him short. A lethal noose had wrapped his ankle, tightening its grip every-time the boat slid down a wave. Cycles of intense pain shot through his spine, while his ankle felt like someone was rhythmically striking him with a ten pound sledge. He screamed in pain, only to blow bubbles and lose valuable air. Instinct took control, and without thinking, the snared sailor dove down to relax the tension of the line. He had one chance to slip the sheet and he had to do it with his eyes shut. He grabbed hold of the line just as the boat slid down a large wave. Time was running short, and he knew he would black out soon from either the pain or the lack of air. The second the line went limp, as the boat rode up the face of the next wave, he pulled his hands together, pinched the line, and jerked his right leg. It worked, and he shot blindly toward the surface only to find himself, a second or two later, gagging inside the half-submerged foam-core hull.

He grabbed for a flashlight he had stored on the keel just for such emergencies. The scene inside the boat was chaos. Each wave sent from one end of the interior to the other saltines, Camels, charts, and countless other items. The boat was hit by a wave that threw him off balance; suddenly, his ears felt like they would explode. They started popping like an arcade B.B. gun. He grabbed for the two speedometer-impellar units, removed them from the casings and vented two small holes. The holes eased the pressure and probably saved him from suffering burst eardrums.

Lashed to the bottom of the bunk was a five gallon jug of water, a dozen flares and a flare gun. And inside the only floating bag he spotted was a pound of cheese and a loaf of bread. He left the food and water on the bunk and threw the flares

and whatever else he salvaged into a sail bag. Using his feet as feelers for stray lines, he lowered himself up to his chin in water. He then started hyperventilating, and, at the moment he started to feel light-headed, the bag was shoved out of the hatch, followed by a scared sailor. He encountered no problems and surfaced several feet from the boat and bag.

The next four hours of darkness were a blur. Though he never slept and his eyes continually darted, he kept a poor watch. He was so muddle-headed, so befogged, that little was clear. The night was a jumbled time during which no thought that passed through his head ended with a period. He had never experienced anything remotely similar to the events of that night, and the one thing he felt he needed to help him digest and round out the jagged contours of the preceding hours was denied him. There wasn't a dry cigarette to be found. This fact preoccupied his thoughts.

A GRIM TURN

WITH ILLUMINATION came strength, and by the time predawn light allowed him to define his surroundings, he felt alert and strangely confident. Yet before the sun fully disclosed itself, Nugent sank into ugly depression. At first glance, he hoped he was hallucinating, but a close inspection of the life raft verified his worst thoughts. The raft was empty. Not a saltine was left. He thrust his fist several times through a slit that ran from one end of the raft's bottom to the other. He stared at the empty raft for five long, painful minutes, trying to deduce what happened. The only thing he could conclude was the fact itself: the flares, tools, water, clothing and other gear he had salvaged were gone.

He believed the stores – worth a minimum of 30 days of sustenence – were stolen by an ocean bent on his slow demise. He looked skyward for the black cloud he felt overhead. But there was nothing but sky. Flustered, he stood on the boat's winch platform, stretched his arms heavenward, and cocked his head back. His lips mouthed several words before he let loose with a shout: *WHY?!* It was the first word he had spoken since he cursed the monster wave, and after he said it he realized that *why* was the one word he didn't want to use. Actually, he was ashamed he said it. He didn't want pity, nor did he want an answer, especially if some voice entered the dialogue with a litany. He just wanted to be saved.

He had known for a long time that more than several people considered his sailing trips as some weird manifestation of a death wish. Others thought he was compelled to go to sea alone because of a disturbing clash of egos rooted in a dissatisfaction of the self. As much as he didn't want to answer their questions – beyond a first impulse to always reply "nit wit" – social decorum demanded a reply. He would explain to them in as few words as possible that singlehanded sailing is the most gratifying thing he can do. Why? Because it is so self-indulgent; the lone voyager doesn't have to share, so there is never any need for accommodation or guilt. He would then romanticize the sport as lending meaning to the concept of adventure, as a one-on-one contest of a man versus the elements. And if they were young, he would add mention of the natural beauty of the sea where life and art coexist (thus saving the sailor from ever having to make a decision between the two) and he would expose the positive aspects of viewing natural phenomena on a horizontal plane like the ocean, where a tree or building never intrudes on the horizon. And if he sensed that they had a political bent, he would satisfy them when he touched on the harmony and anarchy that in fact exist aboard singlehanded sailboats.

But his situation was now gruesome, a fact made ugly and clear because he had to itemize and analyze every macabre detail. In all of his day-dreams – a huge chunk of any sailor's time at sea – he never considered death by either starvation or dehydration. He had accepted death as inevitable (what sailor who has lived through a hurricane doesn't?), but the subject bored him as conversations about nuclear war bored him, or any other conversation based on extrapolation by conjecture. He had flashed on airplane disasters, car accidents, and even the remote possibility of losing all to a brick that once crowned the Empire State Building. But, child of the suburbs, he always imagined quietus as either heroic or convenient. So the idea that he might suffer a slow, painful end frightened him.

He felt an overwhelming desire for company. He wanted someone to look at him, someone to protect; he needed someone to keep intact his mask of confidence, an image he brazenly projected that never before had cracked, thanks to years of puffing and grooming. For the first time in his life, the 28-year-old sailor felt unsure about himself. And for the next hour, he wallowed in a self-concocted miasmal funk, which sent him lower than he ever felt possible.

RETAKING STOCK

THE BOUT WITH acute melancholia was cathartic. It drained his system of doubt. He snapped out of his funk clear and more levelheaded than he ever remembered. It helped him make the biggest conscious decision of his life: he wanted to live. And to reify his will, he raised his head and shouted: "Okay. This is it. I'm going to live. That's right, motherfucker, I'm going to live. You can't change my will to live, try as you fucking might." For several seconds he waited for the

thunderbolt. When it failed to appear, he knew he had, at that moment, radically altered his life. He had finally, ten years after he first read Nietzsche, cashiered his Irish Catholic upbringing. A smile crossed his face as inner strength poured into him; he went to work.

He made a mental note of everything he had: 20 chocolate bars, one flare gun, and five flares – the goods he stashed inside his survival suit – and the stores he had lashed to the bunk. No tools meant no access through the hull, a fact which sent shivers up his spine. He remembered his last dive. But he had to get inside to check the exact contents of the green plastic bag. Daylight made things easier; at least he could see potential ankle grabbers. He checked for stray lines as he hyperventilated. When all looked clear he took a big gulp of air and dove without mishap. He surfaced inside the hull, amazed at how easy a dive could be. The fresh water, all five gallons of it, was still intact, as was the bag which contained a 12-ounce loaf of bread and a pound of cheddar cheese. He counted the thin slices – 22 – and, for the lack of any tool or knife, he marked with his thumb nail 16 more-or-less equal portions on the waxen cheese wrapper. He made some mental calculations and finally hit upon a daily ration plan that would limit him to three chocolate bars, two pieces of bread (a little more than an ounce), two ounces of cheese, and a pint of water. He figured that would keep him alive for at least three weeks, more than enough time for a ship to find him either by chance or in response to the emergency beacon.

He felt refreshed once he resumed his watch position astride the narrow keel line. Though the horizon was clear, he convinced himself that a ship was headed his way. Since the boat capsized along the southern wall of the Gulf Stream and no more than 20 miles from the shipping lanes, the standard great circle path navigated by most transcontinental airplanes and ships, he figured that his emergency beacon, which its brochure claimed had a range of 200 nautical miles and a battery life of four days, had already been identified. He therefore reasoned that a plane had reported the SOS signal and relayed the news to shipping authorities, who, in turn, had notified all transports to divert to his course.

These thoughts of imminent rescue kept his spirits high throughout that Sunday afternoon and early evening. How was he to know that his emergency beacon was a lemon? That it emitted only weak, intermittant signals? How was he to know, without sextant or watch, that he was no longer in the grips of the Gulf Stream, headed toward Portugal via the most heavily trafficked route in the North Atlantic, but rather headed to the south, caught in a strange uncharted eddy that steered him on a course parallel to the Midatlantic Ridge, away from both the shipping lanes and land?

Leery of any nighttime dives, he decided to go inside the boat for his rations right before the sun went down. The dive was uncomplicated, almost easy. He ate his food as slowly as possible and tried to make each bite more than it was. As he ate he tried to figure out a place to sleep. He racked his brain to find a spot where he could recline and stay dry. The logical place was atop the inverted bunks, where the original emergency plan had him accommodated. Unfortunately, with the tools gone he found the area unlivable. When he tried to lie down, his face was less than three inches from the keel line, where the hole was supposed to be. A good sneeze would have broken his nose. The limited space induced intense claustrophobia. The bunks were ruled a last resort, something he would take to only when it was impossible to stay awake. Without any alternatives, he decided to spend all his time atop the keel.

A high-pressure zone, accompanied by light southwesterly winds, kept the sky clear as evening descended. Gentle two-foot seas lapped against the boat. It was a night that reminded him of the pleasures of sailing, when he walked the dog along the beach and decided halfway through his usual evening constitutional to go for a moonlight sail.

He breakfasted on a chocolate bar and spent most of the morning collecting bits of lines, an exercise to pass the time with little practical value save its intrinsic worth as a defense against boredom. Since he had no tools and no books, he had to throw his imagination into high gear to prevent ennui. Two-, sometimes three-part mental dialogues evolved into a cast of imaginary characters with varied voices. And right in the middle of such a dialogue, just as he turned to address a voice he imagined behind him, he spotted a ship on the western horizon.

THE SHIP

T WAS A LARGE cargo ship, and it was no farther away than three miles. He quickly unzipped his survival suit and reached for the flare gun. He loaded and fired. Shot at night, meteor flares are spectacular displays of pyrotechnics that stream long brilliant orange tails as they arc through the sky. At noon, a meteor flare is hardly visible. But that day the flare was enough, or so he thought, as he watched the freighter alter course. He fired another flare. The ship continued to steam toward him. He figured they would be atop him in less than 12 minutes. But within a minute after he computed distance, speed, and arrival times, the ship stopped. It was then less than two miles from the wreck, close enough for him to see eight crewmen lining the ship's starboard rail, close enough for him to

discern the different colored pants they wore. He fired his third flare, but the engines remained silent. He felt a score of eyes staring directly at him. "Why can't they see me?" he asked himself, "I can see them perfectly well." He answered his own question moments later as he stared at the wreck and its black bottom paint and white topsides.

The wreck looked just like a wave, no different at a distance of two miles than any of the thousands of waves in sight. Without thinking anymore, he loaded the pistol with his only parachute flare, aimed it high and to leeward, and fired. The flare arced and exploded at 250 feet in a cloud of smoke. The flare slowly descended, spewing orange smoke all the way to the water. The ship's engines started to rev and the boat slowly picked up speed. It came closer and closer, and at a distance of no more than a mile and one half, Nugent danced a wild jig. He jumped around the boat waving and shouting. He had taken off the survival suit to use as a flag and during one especially animated wave, he lost his grip and he dove to retrieve it. Just as he placed a soggy left leg on the keel of the outer hull, he heard a long horn blast an eerie falsetto tone that came from someplace other than the ship. He turned around and scrambled for the flare gun. Controlled by rage, he sighted the gun and aimed for the bridge of the departing ship. The penultimate flare fizzled 200 yards away.

The ship flew no flag, carried no logo on its stack and never closed enough for the sailor to read its name. He tracked the ship until it disappeared behind the horizon, when his thoughts turned toward scotch and cigarettes.

MAJOR GUNKEL

AT THAT MOMENT, 1900 miles away, Major William F. Gunkel and his crew from the 435th Tactical Air Squadron were readying a plane in North Carolina for a routine delivery flight to Europe. The major was to ferry a C-130 to Frankfort. He decided to file a flight plan far to the south of his usual course. When his commanding officer asked, "Hey, Bill. Why so far south?" Gunkel merely told him, "I really don't know, it just seems like a good idea, sir. Got any beef, sir?" The colonel had none. Once the plane was over water, Gunkel turned on both the standard UHF emergency frenquency monitor and the rarely used VHF channel. Gunkel called himself "an old China hand" and was the type of professional pilot who did everything the regulations demanded, and then some. He was considered by his crew a real pro, a cool headed ex-combat flier who left nothing to luck.

At 25,000 feet the C-130 was on a flight the eleven person crew hoped to be routine. There

ROBERT WEISS AND ASSOCIATES

The 32-foot Godiva before it left Martha's Vineyard

was a friendly atmosphere aboard; the men had all known each other for years and worked as a team for six months. Five hours out from the States, the crew was surprised when Gunkel suddenly commanded silence. "Stop the chatter, *now*!"

Gunkel, with both hands covering his earphones, told his copilot, Ed Gallagher: "Hey, I just heard something on the VHF. Check it out and tell everyone to plug in." The major heard a dot-dot-dot-dash-dash-dash-dot-dot-dot – Morse code for SOS. He shouted in the intercom for confirmation. No one answered. No one heard a thing. The crew members were dubious. Even if it *was* an emergency beacon, they reasoned, why would the major and only the major be able to pick it up? And why on VHF and not the standard UHF? There were no reports of downed aircraft or capsized boats. Regardless, Gunkel radioed the Lajes Navy Base in the Azores and requested clearance to descend from 25,000 feet to 1500 feet. Gunkel explained the reasons for the request and, though the controllers told him there were no reports of beacons, they allotted him a 15-minute search. Gunkel then talked to his crew. "Look, I got a feeling that some poor S.O.B. is out there." The crew quickly scurried to windows with not another word or groan about the detour.

The C-130 was not equipped with outdated VHF direction finding equipment. Gunkel, if he heard anything, would have to guess which of the possible 360 courses to steer. He decided to head the plane on a southwest heading and told Gallagher to "steer 225, true. Honest to God, I don't know why, but steer that course for awhile." The crew heard nothing but static on both emergency frequencies for five minutes. Even Gunkel then doubted that he had ever heard anything. He turned to Gallagher to tell him to resume course for Frankfort. Before he could start the command, he heard another sequence of dots and dashes. This time the radio officer "thought [he] heard something very weak on VHF." Gunkel told

Gallagher: "Steer 230, true. Damn, I know someone is out there."

The plane continued on this course for three minutes before another signal was heard. And 12 minutes into the 15-minute search the entire crew could hear a weak signal that would fade in and out. Gunkel radioed Lajes and told the controllers of the signal. They reminded the "major that [he's] got less than three minutes before mandatory course change back for Frankfort." Gunkel grunted in response and took the controls from Gallagher. He swung the plane five more degrees to the west. At precisely thirteen and one-half minutes into the search, a crewman shouted into the intercom: "Roger, sir, off the starboard wing. Yes, sir. I see something off to starboard, Roger, sir, I can see someone waving. Roger, Dodger, Roger, Dodger. It appears alive."

The plane made several low-altitude passes over the sailboat. After the third pass, Gallagher turned to Gunkel and asked, "How did you know?" Gunkel made no reply; he only shrugged. He had no idea, at least none that he would tell anyone but his wife. Gunkel radioed Lajes and reported the position of the boat. The C-130 stayed on station as long as fuel allowed. Right before he departed, Gunkel took the plane several hundred feet above the wreck and tipped its wings in farewell.

Because of the sighting, Gunkel was permitted to fly to the Azores and stay as long as his superiors deemed him useful for the rescue. Meanwhile, the Navy began plans in conjunction with the Coast Guard, which plugged the wreck's position into a special computer used to track and estimate ship positions via drift, current, and weather data fed it by satellite.

VISITORS

THE SIGHT of the airplane had elated Nugent, of course. Yet the sensation evaporated as he watched the sun set behind a broad, black cloud line, a sure sign of deteriorating weather. And two hours later the weather was rotten: gale force winds, rain and building seas. He knew it was a miserable night for rescue, but he had no idea how nasty the storm would become.

He had not slept in more than 70 hours and his motor reactions made that evident. Before long he started to faint. Most of the times he awoke aboard the boat. But on five occasions he awoke with a start in the water. Each time he fell in the drink he felt a sharp pain crease his forehead or cheeks. The pain felt remarkably similar to an electric shock. He convinced himself that the pain was the reaction of salt on some gash or wound. He realized after the fifth toss into the water that he had to tie himself to the boat or risk the possibility that the next time he was thrown he might never awake. By the time the sun rose, he had lost count of the number of times he had fainted. It was a long, painful night, compounded by a throbbing headache.

The rain stopped well before dawn. The wind and the seas didn't begin to abate until mid-morning. Though the sun gave him energy, Nugent's body ached from the night's rough ride. His face felt like it had been left inside a microwave oven. He wiped his cheeks and was startled when he noticed the sleeve of his survival suit covered in pus, smelly, noxious, green and yellow. Again and again he wiped his face; the pus seemed never ending. He untied himself from the boat and went to wash his face in water. He knelt on the winch platform, cupped his hands, and just as he was about to splash himself, he reeled backwards in horror. The boat was surrounded by Portuguese Man-of-Wars, ocean jellyfish. The boat was in the middle of their breeding ground. Most were the size of silver dollars, some were as big as acorn squash. There were thousands of them.

He stared at the misbegotten invertebrae for a couple of minutes and went back to his task. This time he looked as he dipped his arms into the water. Lucky that he did, for not more than four feet from his left arm was a shark. Three other fins appeared, circling the boat. The sharks, on top of the jellyfish, were just what he didn't need. His face was shocked, his body was exhausted, and his brain felt scrambled: ingredients for mistakes that sharks devour. He tied himself to the boat; he had to make sure he never fell into the water again, and he realized that he would have to time dives with a precision beyond his mental and physical capabilities.

Though the sharks were a menace, this was no Jaws story. The sharks gave the lone voyager a focus. By the end of the day, after what seemed to him nonstop, one-way conversation, he had named each shark. Sometimes there were three, once he counted eight, and at least two always circled and stalked. Because he sighted neither ship nor plane, the sharks received his total attention. He convinced himself that he wasn't hungry or thirsty, but the truth is that he didn't quite trust his new friends. He needed more time before he would dive, to observe the habits and routine of what he thought were Makos. He ate a dinner of three candy bars while a shark ate the silvery wrappers he threw over the side.

TRIALS AND DELIVERANCE

THE FAINTING SPELLS started two hours after sunset, but, being tied and propped next to the daggerboard, he always awoke out of harm's way. Sometime in the early morning hours of Wednesday he heard the unmistakable drone of an airplane.

Suddenly he had no problem staying awake. The plane was more than 30 miles to the north. He could see its navigational strobes and two tunnels of light beamed on the water. It was a rescue plane and the shipwrecked sailor was sure it had his beacon locked into direction-finding gear. He estimated the plane's arrival in minutes. But once again he was wrong. In less than 20 minutes, the aircraft was out of sight. He spent the rest of the night anxiously awaiting its return.

The plane was looking for him. It was one of three Navy detailed to scour the search area, a 60-square-mile bloc of ocean with a center point defined by the Coast Guard computer as "the wreck's most probable position." He had seen a P-3 sub chaser as it made the rescue mission's last perimeter sweep before heading back to the Azores. The pilot of the plane heard no signal, but he did report "a positive sighting of a small orange object." After searching the area for a total of 30 flight hours, the commander of the rescue sortie returned to base and made a report which ended with these words: "Wreckage sighted, boat sunk, no survivors. Case closed."

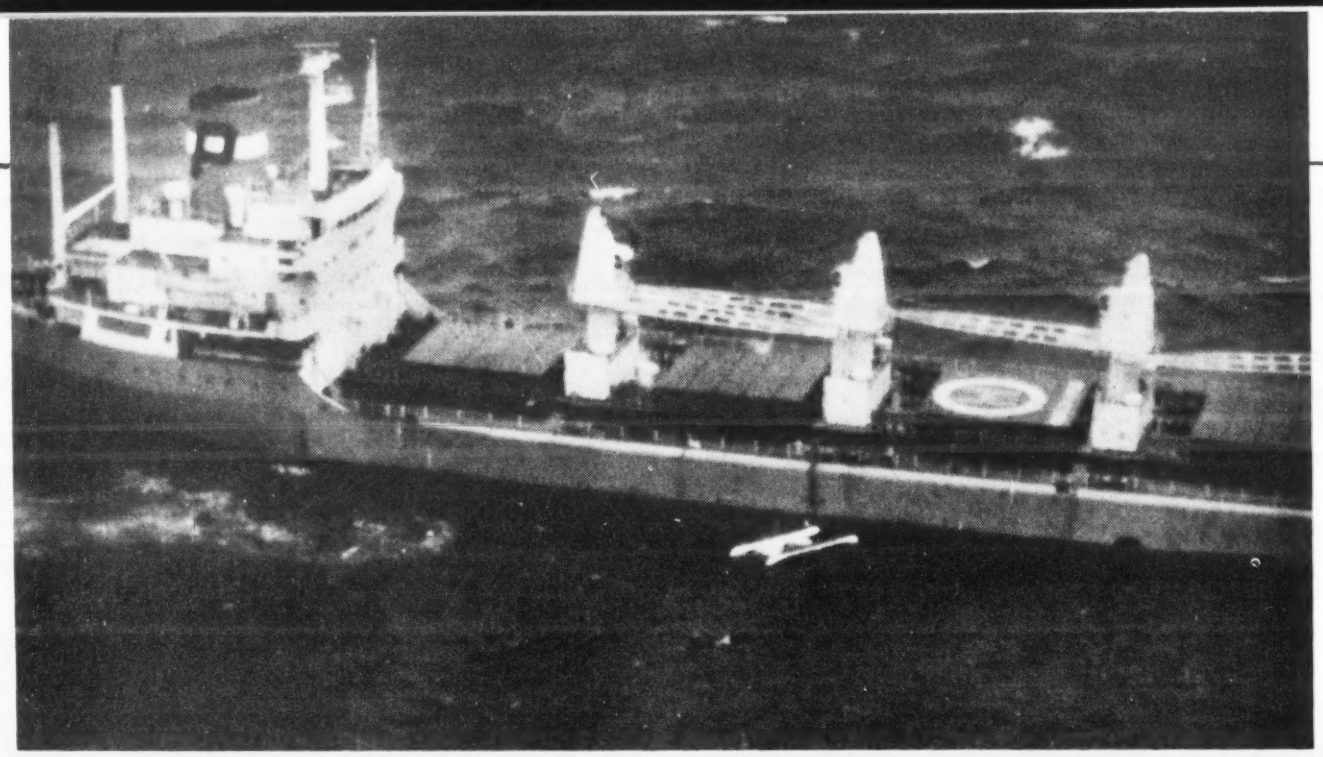
Almost.

Gunkel, still in the Azores, had put his crew on alert. He wanted to help, but he was on Navy turf and the rescue, he was told, was a Navy job. He talked to the first pilot to return to base, and was astonished to learn that the P-3s had searched an area almost 90 miles from the point where he would have placed the wreck. He cursed the computer and, we can assume, the Navy. When the commander filed his mission report, Gunkel read it and shook his head in disbelief. He interviewed the squad commander, pumped him for information, and then ran over to the base commander's office. The official record states that "Major Gunkel vigorously disagreed with the Navy and the Coast Guard's search area." Gunkel and his crew felt responsible for the life of "that poor S.O.B." they saw waving at them. They refused to believe that the person was dead and found it hard to believe that anyone would assume the boat had sunk.

Gunkel told the base C.O.: "Sir, that boat is still out there. I know it is. And I think the boat is somewhere around here." He pointed to a spot 85 miles from the computer's prediction. Everyone wanted to believe that the sailor was still alive, so the officer said he would send one more plane to search an area "where the major thinks the wreck is." The C.O. assigned one of his best pilots, Lieutenant Ed Cheeseman, to the task. Cheeseman and Gunkel compared notes. The Navy pilot then climbed aboard his plane and left. Gunkel raced to alert his crew to ready their own plane. "We are going to make one pass before we go to Frankfort."

NUGENT WAS OBLIVIOUS to anything beyond his vision, a view which was becoming more and more surreal. The sound of the plane kept him awake and even alert for almost four hours. But after dawn, exhaustion caught up with him, blindfolded him from seeing anything straight. To complicate matters, the weather deteriorated once again. Around ten in the morning the wind was blowing 25 to 30 knots and gusting higher; 15-foot seas were building. Visibility was less than three miles and getting worse. A large wave picked up the wreck and the boat raced down its face. When he hit the trough he reached his nadir. From that point on, everything became muted and fuzzy, as if he were covered by a grey flannel bag. Reflex reaction became almost nonexistent. The sailor slid into a subconscious world of his own shabby construction. It was a dangerous state of mind that evened the contours of a raging ocean; he saw no sharks, jellyfish or whitecaps, but only images that reminded him of that day he spent in the Berkshires years ago, after he swallowed a handful of mushrooms that sent everything in the universe spinning save him. He started to feel good and he certainly felt no pain. He had lost control, and this time he simply didn't care.

SEVERAL HOURS AFTER NOON visibility was less than two miles and the seas had increased to 20 feet. Cheeseman and his crew of eight arrived at Gunkel's search coordinates a little before two in the afternoon. No one aboard the P-3 was happy about the weather. "Crap" was the one-word message he sent back to base to describe the conditions. Yet within ten minutes of their arrival, the radio officer told Cheeseman: "I got something, sir. It's weak. But I have got something. Steer 168 true, sir." The radio man twisted and fine-tuned the direction finder and guided the pilot toward the signal's source. It was touchy work: the signal, when it was beaming, had a range of less than 15 miles. Then the rear lookout shouted into the intercom: "Wreckage sighted. Turn her around, Cap." They had found him. The crew started to cheer and Cheeseman radioed Lajes with the news. Gunkel, en route to the scene, overheard the report, which he relayed to his crew. Gunkel took out his dividers and marked the distances between where he thought the boat would be versus Cheeseman's position versus the computer's projection. The figures made him nervous, but his smile was irrepressible. Gallagher asked how far away was the sighting. Gunkel threw him the map and took over the controls. Gallagher was stunned. He turned to the Major and said, "Incredible. Simply amazing." The boat was spotted exactly 12 miles from Gunkel's position fix and 120 miles and 160 degrees from the spot the computer predicted it would be.



LIEUTENANT ED CHEESEMAN, U.S. NAVY

Godiva overboard alongside the Greek freighter Victoria which picked up Rory Nugent. This picture was snapped from the plane of Navy rescue pilot Ed Cheeseman.

The P-3 made at least four low-altitude passes over the wreck before the delirious Nugent connected the engine roar with airplanes. He snapped out of his stupor when one plane flew no more than 500 feet over the wreck, close enough so that he could feel heat from the engines. It was Gunkel, back to stay, punctuating Nugent's trance and adding definition to his wandering mind. Cheeseman's plane was equipped with rescue packs which he dropped into the water 200 yards alee of the boat. The sailor let the sharks investigate them.

Alerted by the Coast Guard in New York, and guided by the circling planes, the M/V Star Victoria steamed toward the wreck. The 580-foot freighter, bound for Lisbon with 35,000 long tons of corn, came alongside the tiny boat perfectly. Only a slight tap accompanied the mooring operation. Seconds later the crew threw out lines and lowered a rope ladder. The efforts to save the boat failed when one line unhitched itself as the ship's crane began to lift the boat; the other snapped under the load. Further efforts were abandoned, as was proper and seamanlike, when a lookout sounded the warning for sharks – "Dogeaters, Dogeaters, Dogeaters." ■

POSTSCRIPT: There is more to this story, of course, less dramatic but maybe just as edifying.

Rory was treated wonderfully by the crew of the Greek freighter. They fed him, and rested him, and expedited his entry into Lisbon four days later. The men even donated a polyester hodgepodge of a shirt, trousers, and a pair of socks. But since none of the Greeks were taller than 5'8", and since Rory is 6'1", the bottoms of the pants reached about mid-calf. And, of course, his face still bore the marks of jellyfish stings and general exposure. When he presented himself at the U.S. embassy in Lisbon, he looked a bizarre mess.

Which didn't help his meeting with the consul general. Because *Godiva* was not an "officially documented" vessel, the consul explained, Rory didn't qualify for the category of "distressed seaman." He wasn't covered in the book. He was just another feckless hippie. The most he could get, the consul said, was a $60 loan. But, of course, he needed a passport – that's $19 – so here's your $41. Sorry, can't recommend any cheap places to stay. Let us know how you do.

As it turned out, the $41 would have to last five days. We family members had been assured by the U.S. ambassador that Rory would be well cared for and lent an airline ticket to London, where he had already established a bank account in preparation for the transatlantic race. We took the ambassador at his word, and sent money to England. All except my sister, bless her. She wired $500 to a Lisbon bank, and that's the money that finally bailed him out. Rory, meanwhile, had found a dive for $3 a night and walked around Lisbon for five days in his unintended clamdiggers. He was alone, as alone as he was on the North Atlantic, in an ocean of people with whom he couldn't speak, rejected by his countrymen. It was a bad time.

The comparison is obvious. Rory had been saved by military professionals. He was screwed by diplomatic professionals. Major Gunkel's embodiment of professionalism included room for compassion and improvisation – when he saw his duty, he did it, and damn the pettifoggers. The consul general used his book of regulations as an excuse for professional and ethical laziness.

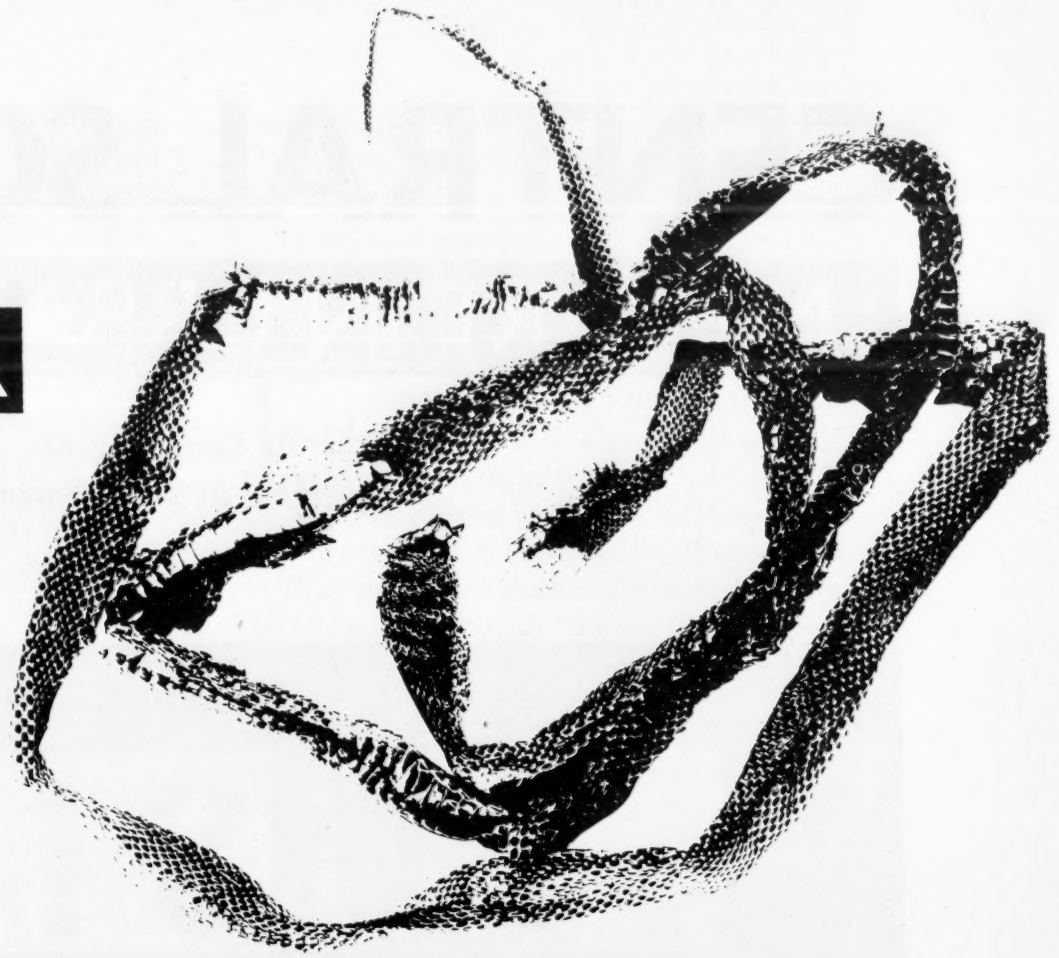
Rory later spoke and corresponded with both Gunkel and Captain Gallagher. He became especially friendly with Gallagher, who sent him copies of the flight tapes which inform so much of this article. When asked again by Gallagher just what it was that allowed him to hear the beacon that no one else detected, Gunkel replied: "I don't know. I just don't know."

–Conn Nugent ■

ON NOT BECOMING A LAWYER

University of North Carolina, 1974-77.

by Margaret Rabb



My idea for a photo collage of the law school turned into a paean of my tribulations there, which did not satisfy me. Use this oddity if you can; of course, you'll recognize all the ancient snake stuff, but I am thinking of my own peculiar reaction to the skins. Even after I found them (between the boards of panelling and the logs of the wall in an old log house we tore down), I was fascinated by the way they reproduce the snake in every detail. Though I scoffed at my friends' repulsion, I am still rather loathe to touch them. As I am still quite chary of touching various "failures."

—Margaret Rabb

BRICK-LINED corridors, sealed pavers on the floor. Hot tinted glass gangway pinches the waist of the building, separating classrooms from library and faculty offices. In the basement, lockers and student lounge, where unfocused color TV flutters to potato chips in cellophane bags. The seat of ratio-consecutive, counting-on-the-fingers, short-term thought. "*You*'re going there?" he said, too loud, over the party music. "I have fraternity brothers who would give their eye teeth to get into that law school."

In class I watched wasps build a nest over the florescent light fixture, timed the first student from seat to professor's side as the bell rang. My notes turned into a curious, loose, sleep-writing scrawl about 20 minutes into any lecture. I stopped going about half the time, but exams were all-important and based on cramming skill, so I floated along in the middle of the pack.

In corporation law we didn't have time for partnership or nonprofit incorporation, which I learned by myself, incorporating and filing tax-exempt-status applications (not covered in taxation, either) for a half-dozen arts and health action groups. Shortly into the environmental law seminar – one table, ten males, one female, three hours, no windows – I found I could no longer summon the energy to challenge prolonged discussions of minor procedural problems amply covered in other courses while whole areas like endangered-species legislation and case law were untouched.

Interview sign-up sheets for third-year students appeared in the hall. We were required to furnish the placement office with resumes, current photo printed upper right. Only one interviewer was interested in environmentalists. His first question: Is it Miss or Mrs.? I asked what sort of pollution standards a company lawyer would be asked to defend. He ran a finger around his neck under his collar: "What *is* pollution? If I pee in the ocean, that pollutes it. Everything is pollution."

I didn't want to sign up for any more interviews. I began to realize that I couldn't imagine a job I would want to get up and go to every morning. Twelve hours to graduation, I exhibited my bubbling, cracked fingers to the registrar. ("Nerves," said the doctor. "Use this cortisone cream.") I filled out withdrawal forms in blue ballpoint, pressing hard through the white, yellow, and pink layers. Then out past the amphitheater classrooms, the library where any helpful book is checked out by the hour. No more progressive view of personal history, that everything is getting better and better. No more reassuring "I can do anything with this degree." Back in the nonprofessional minimum-wage world, stuck with a big debt, a national-defense student loan. But walking down the wide steps toward the street, lighter and less, I remembered the directive on which such pivotal moments swing open: "Art says to us always, you must change your life." (Rilke) ■

Peggy Rabb now works for Southern Media in Chapel Hill. She designs and produces slide/tape programs, videotapes, and graphics. She says: "It was great to have a reason for writing about this experience which has shaped my subsequent life the way negative space or a big neutral area works on paper."

Since I'm a law school graduate who bailed out in the middle of the California bar exam, I found this piece especially likeable. –Conn Nugent

CENTRAL SQUARE

MY PART IN URBAN DECAY

text by Conn Nugent
photographs by Steve Button

It is a confused, unsightly, often dirty commercial strip . . . . It has evolved into a characterless, centerless sprawl, most of whose architecturally interesting buildings have been marred by excessive signs and ugly synthetic facades. *–Colin Diver, "The Evolution of Central Square," unpublished report to the Cambridge Historical Commission*

Central Square is the second-busiest intersection (after Harvard Square) in Cambridge, Massachusetts. Cambridge is a city of 95,000 people, immediately north of Boston.

Steve Button comes from Newcastle-on-Tyne. When I saw some photographs he had taken of his old hometown – unpretentious, rather dilapidated – I knew he was the man to capture Central Square. Steve is at HOME, Inc. (not the same H.O.M.E., Inc. described in the Summer 1982 CQ*), an organization of artists who work with teenagers from Roxbury and the South End of Boston.*

For purposes of this article, you may want to know that I come from Irish families out of New York and Pennsylvania. I have lived in Cambridge since 1964, with two-year hiatuses in Costa Rica, California, and Cape Cod. –Conn Nugent

THE WINDOW IN MY OFFICE above the five-and-dime reveals the whole mess. It is a warm summer Saturday. Merchants have placed their wares out on the ample sidewalks, creating the noisy ambiance of a bazaar. You can imagine a Phoenician trading post: Africans and Latins, Jews and Celts. They disparage the merchandise, talk volubly. The lingua franca is English, but Spanish is common, and Portuguese and Greek and Creole. Dance rhythms pound everywhere, from the conga drummers near Prospect Street to the radio shop blasting salsa and *merengues*.

Cars zip by too fast. They run red lights, turn without warning, and swerve around the sudden walls of double parking. Pedestrians ignore signals and jaywalk defiantly, en masse. The police look on. This is a culture – or better, a mix of cultures – that follows some regulations, but they are not necessarily the regulations of the state.

Many of the people outside my window are trim and fashionable in a sassy urban style. Some are stout and rumpled, but respectable. Others are stout but rather less respectable looking. In truth, a lot of people here are pretty fat. This generalized obesity will often put off the puritan or the Californian, but it's a comfort to me. Someone who can always stand to lost 15 pounds feels at peace in the land of the 38-inch median waist. All in all, a healthy level of self-esteem is easy to come by on a street like Massachusetts Avenue, with its relentless reminders that everything is relative. If I deal unfairly with my children some morning, I draw solace from the casual mistreatments by some Central Square mothers at the lunch counter. If I worry about the checkbook balance, a look out the window reminds me that I'm richer than most people around here, and enjoy better prospects. And for the benefit of about 90 percent of us, Central Square attracts a reliable population of poor street alcoholics who have come near the ends of their ropes. The dynamic can flip on you, of course, and things can turn depressing, but the overall sensation of not-hiding is generally a tonic.

And on this balmy Saturday, things are downright pleasant. I can look out my window at the crazy salad of people who have come for the things that only Central Square can provide. Here are some items you can't get anywhere else in Cambridge:

- chocolate-chip-banana-bran muffins;
- real army-surplus gear;
- Trinidadian phonograph records;
- tap-dance lessons;
- a Chinese lunch for $2.98;
- the writings of the Defender of the International Proletariat, Comrade Enver Hoxha;
- macrobiotic fast food;
- back issues of pornographic magazines (covers removed);
- pawned saxophones;
- meat-loaf specials, choice of peas or wax beans.

LUCKILY OR NOT, the official revitalization of Central Square is at hand. My building will be demolished soon, along with its three sisters to the west. They will be replaced by a block-long reflective-glass structure that will feature offices, shops, and a cinema. Out go the Marxist-Leninist Bookstore (Albanian loyalties); the florist; the Mandala Folk Ensemble; a couple of conspicuously unsuccessful older dentists; the derelicts who block the door and sleep on the stairs; and me and a few other marginal enterprises. In come consultants and software specialists and shoppers in search of tweed.

Not much misery will result. The tenants in these doomed buildings are fairly resilient types. It's other things I worry about. I regret the personal loss of a work environment which is convenient, entertaining, and radically unconcerned with what sort of degrading shape my office or I may be in. And I'm saddened by the erasure of these relics from an honorable past.

FOR IF CENTRAL SQUARE has never been posh before, it hasn't always been seedy. From 1910 to 1945 – the heyday of most Northeastern cities – this section of Massachusetts Avenue was a reputable hive of commerce, a family-style boulevard of department stores and grocers and cobblers and bakers and doctors and movie theatres (this was in the time before cinemas). It was regarded as a handsome if utilitarian section of town, and it was very popular. One old-timer remembers "when crowds used to jam the sidewalks on Thursday and Friday nights so tightly that it was hard to walk." The sidewalks are 18 feet wide.

These nights, the square is ominous and mostly empty. The few pedestrians walk fast. And in the daytime, although there is bustle – Lord knows we have bustle – it's not much of a family kind of thing. We have record stores and liquor stores and restaurants and discount-jeans shops, but there's only one nice old department store, only one grocery store, and only a small vestige of doctors and plumbers and dentists and shoemakers.

There are many reasons for this change, of course, and lots of us amateurs can tick some of them off. Suburbs, cars, shopping centers. The closing of factories. Television and advertising. The natural deterioration of buildings and public works. But intertwined among them all, simultaneously cause and effect, is perhaps the most salient social phenomenon of American cities since the Second World

War: the departure and reduced influence of working-class families, mostly Catholics from the outer edges of Europe.

ALTHOUGH THERE WERE literally millions of exceptions, some generalities apply to those Catholic urban families between the wars. They were bound by close loyalties, ties of ethnicity or neighborhood or parish or political clubhouse or all of these. They were products of an immigration-and-settlement process that had worked well for them and their parents and grandparents, and so they tended to be patriotic and economically optimistic, even during the Great Depression. They lived in two-parent, many-children families. They tended to rely on local and informal mechanisms for preserving public order and enforcing standards of decorum, both of which were important. And they didn't particularly want to go anywhere else. Central Square reflected their needs and aspirations. It was lively, but reasonably well-behaved.

These days it treads a balance between the charm of old waitresses who call you "dear heart" and the belligerence of ill-raised teenagers. Your street manner has to be flexible, disposed to politeness but ready for rude abrasions. Beyond the question of courtesy, it is certainly true that this whole town is short on civic-minded behavior. When it snows, for instance, walks go unshoveled and the old and disabled have to negotiate the treacherous dark-gray urban permafrost that covers our pedestrian ways from January to April. Cambridge favors a chip-on-the-shoulder, consumerist posture in which you always try to compel others (the landlord, the city, the business) to perform things you could do yourself as a matter of simple citizenship.

It will not suffice to blame this negative turn on poverty, at least not in any absolute sense. Everyone agrees that Cambridge 40 years ago was more thoughtfully public spirited than it is now, and yet the private wealth of those old-time working-class families was much less than that of comparable households today, even allowing for inflation. What was different – and again, we're talking of something both cause and effect – was that the *public* amenities enjoyed by the Cambridge families of, say, 1940 far outstripped what we count on today, and the square reflected that different emphasis. The subways were cleaner and faster. There were lots of trolleys and streetcars. The nearby parks and ballfields and other common places were better maintained and dramatically less vandalized. It was safer to get around, especially at night; crime was less common and much less likely to involve a lethal weapon. In all, there was a sense of social membership which eludes us today.

The Irish-Italian, native-Cambridge culture exists still in Central Square, and with no small force. That's one of the attractions of the place. But the culture has lost much of its confidence and potency and altruism, and its decline is evidenced all around. Many of the old ties have unraveled; the economics have gone sour; the informal rule-enforcement has been largely abdicated. Many of the ambitious young adults of old Cambridge families have gone to other places to raise their kids. In 1950, 87 percent of the households in this town were families (related individuals under one roof). Now it's 45 percent.

CAMBRIDGE HISTORICAL COMMISSION

Central Square in November, 1920. Citizens gather at the door of the Central Square theater on the north side of Massachusetts Avenue.

CAMBRIDGE HISTORICAL COMMISSION

WHATEVER THE LOSS of sobriety and optimism, Central Square has gained a lot during its funky, multi-ethnic decline. I do enjoy looking out the window, and I remind myself that the old Central Square was less hospitable to black people, more confining for women, and less tolerant of the yeasty leftwingers migrating down from the university enclaves. But who can prefer the future of this place? The future will elbow aside some bums and some poor tenants and maybe some of the tough guys, but it won't bring back families and courteous trolley conductors and the dedication to place. We'll get none of the benign visionary stuff here, no small-farm renaissance, no double-envelope houses, no crafts revival, not even the imaginative recycling of older buildings. We'll get the cost-accounting and esthetics of a future that deems blighted our little building of wainscoated halls and marble sinks. The cold fact always intrudes: they're going to tear this block down.

So I'm out of an office. As it turns out, I'm also out of a job. My employers have told me that the program I run – distributing about $450,000 a year to nonprofit neighborhood groups – should phase out by March 1983. Too bad for the neighborhood groups, not so bad for me. I gulp now, but I'll land on my feet somewhere, the beneficiary of class and education. Food and shelter and tickets to Fenway Park will be provided somehow. I love my wife and children, and they love me. Here, in Central Square, my bags ruefully packed, I count myself among the lucky. ■

The same block in '35 and '82. What was a five-story building (over Corcoran's) was reduced to a two-story building (over FF, which stands for Friendly Family Center) in the late 1940s. The author's office is in that soon-to-be-demolished building.

MOTHERS IN DISTRESS

AN ANTHROPOLOGIST DESCRIBES THE WOMEN OF ULUAZAPA, EL SALVADOR

by Polly Harrison

WHO'S RIGHT about peasants? Do we agree with the Hobbeses that primitive life is "nasty, brutish, and short," a battleground for "every man against every man," and that peasant life is a muddle of fear-born suspicion, fatalism, passivity, and conservatism?

Or do we lean toward the Rousseaus, for whom savages were noble, pure, and healthy and for whom peasants were homogenous and egalitarian celebrants of land and hard work?

Or is there another perspective which draws from both, something which has to do with disappointment, struggle, and exploitation, and with the sense of a good life (if not Paradise) on its way to being lost?

As usual, it's best to ask the peasants themselves and, as Calvin Trillin would say, give the theory a skip. Beginning in 1976, with little theory in mind, I began a series of visits to Uluazapa, a small town in the eastern mountains of El Salvador, for the purpose of figuring out how such a community managed its health needs. I began to educate myself by first systematically reviewing all patient records, only to find myself counting and recounting the following sorts of data:

Out of a preliminary sample of women in fertile age (15 to 44), 67 percent had at some point in their clinic careers been prescribed tranquilizers, either meprobamate or diazepam or both. Of these, about half had been diagnosed under the syndrome labels of 'neurosis,' 'anxiety neurosis,' or 'preulcerous symptoms.' Most of the rest had reported psychological problems relating to threatened or repeated abortions or incipient menopause, or had displayed such indicators of possible psychophysiological disorder as insomnia, tension headache, or migraine, and a variety of physical symptoms and general malaise with no explicitly diagnosed organic cause.

To be sure, much of this might have been attributable to the gastroenteritic and diarrheal diseases, anemias, vitamin deficiencies, and pregnancies which trace so much of the Central American health profile. And the psychiatric syndrome terminology imposed by the recording public-health physician might have been facile, erroneous, culture-bound, or gender-bound, given the speed and necessary superficiality of the doctor-patient encounter and the class and sex differences between the two parties to that encounter.

Still, none of these possibilities explained why the village women who advised me on the content and language of my health survey questionnaire were urging me to add the category 'worried' to the survey questions about pregnancy and childbearing. Nor did they explain the frequent references made by my new friends to problems with their nerves. Nor did either possibility explain something I gradually uncovered over a year and a half – the existence of a well-elaborated vocabulary of symptoms which had different uses and which expressed different mental and physical conditions. Amidst the murk, which often seemed to thicken rather than dissipate, one fact stood forth clearly: many

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Polly Harrison is a medical anthropologist who has lived and worked in Central America and the Caribbean since 1964, consulting on development policies and projects, primarily in rural areas. She did her doctoral fieldwork in El Salvador, beginning in 1976. It was then that she first met the people of Uluazapa.

Polly's account speaks for itself on the social intractability of certain kinds of pain and abuse. But it may be worth suggesting what the women of Uluazapa can offer to most of the people who read these pages: a reminder of the small scale of our own disappointments and of the huge work of justice. We need to remember that there is such a thing as misery. It is almost always undeserved, and its lessons are rarely worth the price.

For the last two years, based first in Haiti and then in post-revolutionary Nicaragua, Polly was the Regional Social Science Advisor for AID. She is now back in Boston, thinking about it all. –*Conn Nugent*

ELI REED/SAN FRANCISCO EXAMINER

The photos for this article came from a 1982 San Francisco Examiner reporting project on the people and politics of Central America. This photo was originally intended to illustrate the need for agrarian reform in El Salvador.

Problems come not from kinks in female personality, from sex-specific wackiness. It is just that the circumstances of life are stressful beyond reason.

of the women I was coming to know were in real psychic distress.

BODY PAIN, MIND PAIN

MUCH OF THIS distress emerged couched in somatic terms, that is, in the form of some bodily complaint of pain or dysfunction; we can think of it as another kind of body language. In fact, when women talked about this sort of distress, their bodies were actively involved in symptom presentation. Even for women whose standard persona was reserved, gestures became more expansive and almost metaphorical, hands were raised to cheeks and temples, hair was clutched and pulled back, spines were arched, and pieces of clothing tugged and wrung. Women spoke of pain or numbness or irritability in parts of the body, mainly head, back, and extremities. In fact, it was rare to find a woman for whom headaches were not chronic, more often than not of a type fitting the classic description of tension headache.

Pain and palpitations in the cardiac region were common. One woman described a great pain as if her heart were going to leave her body for someplace else; another of feeling that her heart was going to literally break; another that the "tension" of her heart, its beating, had quite stopped. Women spoke of dizziness, faintness, lethargy, anorexia, chills or feverishness, cramps, insomnia, nausea, trembling, and attacks of diarrhea when angry. They spoke as well, in more clearly psychological terms, of a sense of general affliction, unease, or suffocation; rage, sadness, and weepiness; forgetfulness and loss of concentration; unusual pensiveness, irritability, nervousness, or restlessness; worry and apprehension; nightmares; susceptibility to fright, fear of dying or going crazy; and of urges to scream, cry, or run away.

When I began to analyze the complete symptom list and to juxtapose it against the standard psychiatric manual list of syndromes for depressive and anxiety disorders, I found that the list conformed almost perfectly with 'simple anxiety states.' While

the key diagnostic criterion of true depressive states, diurnal mood change, did not appear, there was frequent presentation of the secondary depressive manifestations sometimes associated with the anxiety neuroses. Thus the women of Uluazapa seemed to be showing unmistakable signs of suffering from clinically authentic anxiety disorders with distinct depressive undertones.

AN EPIDEMIC OF "NERVES"

THE OBVIOUS question is: why? Again, the clearest path of inquiry led to and from those same women. Good anthropologists and participant observers of their own condition, they offered specific explanations and general theories about what ailed them. All of them shared with modern psychiatric diagnosticians the perception of nervous disorder – they termed it *nervios* – as a shifting constellation of sensations and reactions, varying in its manifestations from person to person, from situation to situation. Some of them saw their psychic distress as proceeding from a single cause or event, but most believed it to be produced by a number of factors operating together or following one another in some kind of unhappy sequence.

At this point I think we should silence the anthropological voice and let the eloquent and accurate subjects of this disquisition speak for themselves.

This is a very small part of what they said:

- "I've been having headaches, feel bad all over, can't sleep. They tell me it's my nerves. There's nothing in particular. Nerves cause nerves."
- "I've had 17 years of martyrdom with that drunk. My children agree that I should leave him. That's why I've got nerves and can't sleep at night. He even stole the little bit of money I had put away."
- "Ay! Yesterday I had a fight with a neighbor. I get so nervous that my whole body trembles. When I get angry, I get a headache. Nerves always come from anger. You get mad and then you feel like your face is really cold, you feel like crying, like you're seized by affliction."
- "I didn't suffer from nerves when I was young but now, yes, because of the business with the children. It's a burden to take care of my children. Now I suffer with anger, weakness of the blood, nerves. I've had two childbirths go wrong."
- ". . . A sense of affliction, a great pain in my heart, wakes me up. I stay awake until I'm not sleepy anymore. I cry a lot and have that sense of coldness. I can't bear to see someone hurt, someone dead. If I go someplace, I get that great feeling of affliction. So I stay home. Sometimes I get that nervous chill before childbirth and during it, too, and then after, when I'm weak."
- "When my son drowned in the river, I became sick with nerves. Before that I didn't have them. Now I'm always worried – being poor, the little girl sick, the other boy sick. I bled a lot during the last childbirth, and now this one. They get me pregnant and then they leave me. With the slightest little thing, I get a fit of weeping, headaches, fainting."
- "I have the urge to go far away, that's how I feel when I have nerves. I feel this great anger, the urge to cry when someone talks to me. I can't sleep, I have to urinate a lot, my whole body feels irritated, from thinking about things, things with my husband. Maybe he's playing around. Maybe something bad will happen to me. Or from having all these responsibilities. And I get this great throbbing in my heart, as if it would explode."
- "I think things I shouldn't think. I'd like something for my nerves. May God forgive the things I think. Sometimes I think I'm going crazy. With nerves you can do crazy things. I think about danger, affliction. I can't sleep from thinking about being poor."

With time, order began to emerge from this chaotic profusion. When all the detail from the hours and hours of conversation was reduced, we saw that there were only four grand categories of explanation. The women of Uluazapa said that the source of most of their distress lay within the adobe or straw walls of their own homes – in troubles between men and women; in ill health; in the problems of children, sick, crying, or too many; in the poverty that makes these things more worrisome and pulls at the fabric of the home. The theme of pregnancy and childbirth moves through these categories as a reason for fear, poor health, and anxiety about physical and economic capacity to care for more children. The victim is not to blame. Problems come not from kinks in female personality, from sex-specific wackiness. It is just that the circumstances of life are, at one time or another or much of the time, stressful beyond reason.

THE MATERNAL NEXUS

LET'S LOOK at childbearing, the gathering point for a lot of this stress. After all, that is what absorbs most of these women's energies for most of their lives. They start early. Many have had their first child before age 19. As one teen-age mother wistfully put it, "Around here you get tied to a man so young that you hardly have any youth."

And there are many children: an average of seven pregnancies, one spontaneous or induced abortion,

ELI REED/SAN FRANCISCO EXAMINER

Women and children at a stream on the outskirts of San Salvador.

The women talk, seemingly incessantly, about health, as if the health search had become a proxy for the futile search for a better life.

and one infant or child death per mother. While maternal mortality figures have been dropping in El Salvador, historically they are high and it is unusual for a woman not to know personally of at least one other who has died in childbirth. Women know they are not really healthy, if only because they feel rotten a lot of the time, because they miscarry, because their babies' health is poor, because babies die.

Most women eat erratically or poorly. Most families in the area can spend no more than a dollar a day on food, and this uses most of any cash income they may have. Iron and folate deficiencies are clinically expected for such women, who are either pregnant or nursing most of the time. Some women observed that they were generally eating less well than they had earlier in their lives (and even worse during pregnancy when appetite is off). This is domestically and statistically accurate. Recent studies show that overall nutritional status has been worsening. El Salvador has come to be included with Bangladesh and Haiti among the countries with the world's most precarious nutritional situation.

Fear of miscarriage, fear of death in childbirth, fear of a misformed fetus, fear of infant death, even in mothers with the most negative feelings about having another child, all make childbearing a focus of high anxiety. This is intensified by the prospect of childrearing, something many women do pretty much on their own. Close to a quarter of the households in Uluazapa are effectively women-headed, even more if we account for the males who emigrate for at least part of the time to find some work and earn some cash. Uluazapa is in an area of marginal agriculture with a lot of unproductive land and some small holdings of land which grows poor crops of corn and sorghum. More than half the available land and all the good flatland has been traditionally monopolized by large-scale cash-cropping, mostly cotton. Few of the male companions of the Uluazapa women own land. Most rent it, some are resident peons or landless day laborers, all strategize by using all available modes of subsistence. There is little work for women to do to earn cash – a little petty trade, a little artisanry, a little dressmaking, a little cotton-picking.

ELI REED/SAN FRANCISCO EXAMINER

A family in a Salvadoran village, Soyapango. Left to right are Maria Isabel Pineres, 21; Rosa Veronica, 3; Najacinta, 5; and Candido, 40.

Neither men nor women in rural El Salvador can easily become what they were brought up to be.

Economic well-being in Uluazapa ranges from nonexistent to tenuous. Self-images are correspondingly fragile. Women are raised to occupy an essentially derivative and dependent role, yet real life often forces them, untrained and unprepared, to become heads of household. Men are raised to be providers of security and economic well-being, yet real life often makes that close to impossible. Neither men nor women in rural El Salvador can easily become what they were brought up to be. Small wonder that, especially for women, stability of personality and relationship is a core value: prestige, economic security, and peace of mind are all at stake and so rarely achieved.

DEFENSES AND SURVIVAL

SO HOW DO THEY COPE? Men address this antagonistic environment with their machetes, their pride, and their sexuality. Between 1971 and 1976 acts of violence, associated with things sexual, with revenge, or simply with high rates of latent hostility, moved from third to second place as a primary cause of death in El Salvador. Men resort to alcoholism. El Salvador may have the highest proportionate Alcoholics Anonymous membership in the world.

Salvadorean women cannot or do not go this route and their other options are few. The younger ones emigrate. Some find factory jobs, some become domestics or engage in commerce, some become prostitutes. The ones who stay home have to paste together a few flimsy bits. The bits of earning I mentioned. The abortions that are all said to be spontaneous but which midwives say are often induced, not of course by them. The sense of irony and wry cynicism about men, where one might expect bitterness.

But most of the coping has to do with health strategizing. The world of the most remotely rural women has been expanded by the recent installation of a rural health post, a good excuse to go to town for women who have customarily had little mobility. The majority of all clinic usage is by adult females. Not only do women use the clinic but they talk, seemingly incessantly, about health. They swap advice and make home remedies; resort to the midwife for massages and a bit of a chat; visit the pharmacy with high frequency; go into the departmental capital to look for other health deliverers, including herbalists and traditional curers. All of this they do in different sequences and combinations, depending on the health issue at hand. It is as if the health search

had become a proxy for the futile search for a better life.

The ultimate tactic has to do with childbearing itself. More women are enrolling in prenatal care programs and more are trying for hospital childbirths. Part of this has to do with their desire for healthier babies, but an astonishing proportion has to do with a desire for surgical sterilization. The women of Uluazapa, like most rural women, reject temporary methods of contraception for a variety of reasons, part mythological, part medically astute, and less than 10 percent were using them when I was there. Yet close to two-thirds of one sample interviewed were considering or actively seeking sterilization through clinic enrollment. The national rate for sterilizations in 1977 was 52 percent of all family-planning acceptors. Women, many of them young, were quite matter-of-fact and deliberate about what they were doing and even had evolved the words and concepts appropriate to their actions. Pregnancy and childbirth were illnesses from which one healed oneself. Contraceptives were unacceptable Band-Aids. The cure was sterilization.

The health post thus becomes a central, perhaps the only, feasible strategy. It is the way to sterilization, the way to healthy babies, and, to return to those supposed neuroses, a place where women can speak, however indirectly and unsatisfactorily, of the distress that pervades their days and nights.

Back to earlier questions. Are the women of Uluazapa neurotic and anxious without due cause? Do they not recognize Rousseau's rural paradise? Did it, perhaps, exist once and has something terrible gone wrong? Is it, perhaps, that they are caught between both the discontent of civilization and its unjust absence? Is there really anything to romanticize about? ■

MALE FAILURE, FEMALE SUCCESS

FROM AN INTERVIEW WITH FRED HAPGOOD

CONN NUGENT: In your book, you point out that virtually all sexual species have many more offspring than are necessary for population equilibrium . . .

FRED HAPGOOD: Not "virtually all" species. All species.

NUGENT: . . . And that most of these offspring die before they get a chance to reproduce . . .

HAPGOOD: They get eaten, usually.

NUGENT: . . . And that even for that small minority that reaches breeding time, most lose out to a sexual competitor. Which is particularly true for males, of course. Well, why are there so many unsuccessful males? Why is the incidence of failure so high?

HAPGOOD: Let's see, what sort of answers work for questions like that? How about: "That's just the way it is"?

NUGENT: Fine. That's the one I use on my son all the time.

HAPGOOD: But, O.K., let's be more analytically rigorous. One could blame the males and say that there are just very few competent males. One could blame the females and just say that females make life difficult. Or one could chalk it up to evolution and say, as I did in the book, that the structure of gender only makes sense when you say that males do things that are so destructive to themselves that if females were to do them the loss to the gene lines would be terrific.

Now, if you can imagine a hermaphroditic species with a phase of activity that is very dangerous, or at least engenders terrible possibilities of failure, then you can imagine the evolution of something like males, in which all of the physiological reproduction of new individuals becomes the property of some fraction of all the current individuals (females), with the remaining fraction engaging in the dangerous activity (males).

For instance, scorpion flies have trouble with spiders. Hunting for things to eat, they're likely to get eaten themselves. So now imagine a species of hermaphroditic scorpion flies, where all the individuals reciprocally fertilize each other and all engage in the same behavior. And imagine a gendered species of scorpion flies. Under what circumstances would the gendered species, in which only half the individuals would construct individuals of the next generation, outcompete the hermaphrodites? If the females are kept safe, then the males can run the risk of the spider webs because one male can do the work of many. One female can't do the work of many. *That's the difference between male and female.* The reason why there are so few successful males, from an evolutionary point of view, is that they were born to fail. Their function is failure, at least compared to females, whose function is success.

NUGENT: Success relative to males.

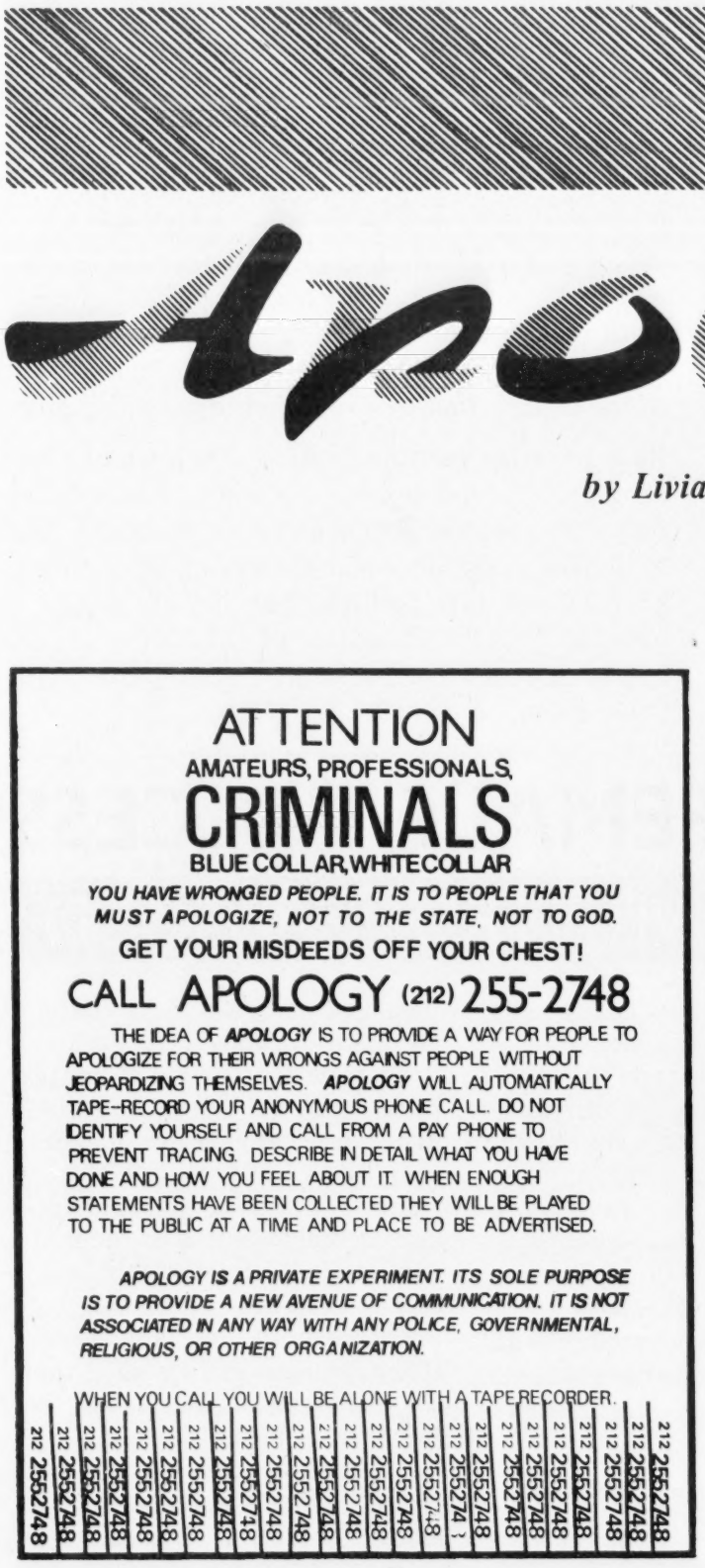
HAPGOOD: Yes, relative to males, but also, and more importantly, relative to members of that hypothetical hermaphroditic species. ■

Fred is a science writer whose work appears in a variety of publications. His latest book, **Why Males Exist** *(1980, $2.95 postpaid from New American Library, 120 Woodbine Street, Bergenfield, NJ 07621), is a readable, illuminating consideration of gender and sexual behavior. He lives in Boston, in an old warehouse by South Station. That's where this conversation took place.*

–Conn Nugent

Apology

by Livia Linden



Apology's sign, posted mostly in subway stations

This story about an artist who tries to stay dispassionate while collecting anonymous stories of crime and misfortune on an answering machine was submitted last summer by Los Angeles screenwriter Livia Linden. The artist, whom we still know only as Apology, sent his fascinating postscript a few months later. His tapes are still occasionally played in museums; if you think a gallery or museum in your town might be interested, write Apology c/o CQ. *Or you can hear these tapes played back non-stop by calling Apology's original number, (212) 255-2748. This article resonates with The Party Line (p. 76), another attempt to create community through telephony.. —Art Kleiner*

WHY DO I LIVE IN PRISON? The answer is quite simple. I killed somebody. I blasted the stupid jerk out of the sky. He deserved it. He stepped on my foot. So now I'm on fucking death row, and I'm patiently waiting to get fried. If there's any chance I'm going to . . . but they haven't passed a law on it yet. That means I'm sitting here waiting to die. I don't like that. You think I dig that sloppy shit they call food everyday? Man, I'm waiting for my last meal. Boy, I heard it was steak. I haven't had that in years. I hate this place. It really sucks incredible shit. I want to die. Good-bye, cruel world. I'm going to kill myself or get killed trying to escape.

I'm 12 years old. There's this girl at school and I keep snapping her bra. I feel real bad about it but I can't stop.

THESE ANONYMOUS MESSAGES are some of the thousands that Apology received on his telephone answering machine after pasting 1200 posters throughout the streets and subways of New York City bearing this message:

> Attention: Amateurs, professionals, blue collar, white collar. You have wronged people. It is to the people that you must apologize, not to the state, not to God. Get your misdeeds off your chest! Call Apology (212) 255-2748.
>
> The idea of Apology is to provide a way for people to apologize without jeopardizing themselves. Apology will automatically tape-record your anonymous phone call. Do not identify yourself, and call from a pay phone to prevent tracing. Describe in detail what you have done and how you feel about it. When enough statements have been collected they will be played to the public at a time and place to be advertised.

Apology is a private experiment. Its sole purpose is to provide a new avenue of communication. It is not associated in any way with police, governmental, religious or other organization.

When you call you will be alone with a tape recorder.

They have called in droves – killers, muggers, rapists, thieves, jokesters, gangsters, housewives, hard-hats, husbands, lovers, perverts, addicts, children, teenagers; the lonely, the lovelorn, the fed up, the down and out, the strung out, the sick, the solid citizens, the desperate, the lost, the nowhere, the forgotten.

They call to confide the things usually heard by psychiatrists, priests and police. They call to catalogue the hurts. Their own, and those they have inflicted. Some let loose endless psychotic ravings. A few even call to say they are blameless.

I'm sorry. I've realized you don't have to apologize for anything.

Like the unfortunates who appeal to the love-advice columnist in Nathanael West's novel, **Miss Lonelyhearts**, they speak in painsoaked voices, "stamped from the dough of suffering with a heart-shaped cookie knife."

Most are guilty. *Mea culpa*. I confess.

THE "PRIEST" of this electronic confessional is a sculptor who earns his living as a cabinet-maker. Apology – or Mr. Apology, as some callers refer to him – is in his early 30s, middle class and well educated. Blue-eyed and handsome, he has a quick, brilliant smile.

Before becoming an artist, Apology studied physics. His scientific background is reflected in his paintings, large canvases which detail atomic structure, as well as in the large, machinelike sculptures he now builds in his studio loft.

The loft is in the far West 20s, in New York's flower district. A three story walk-up approached from a debris-strewn entryway, it is on the inside a stunning expanse with high, pressed tin ceilings.

The telephone-answering machine sits in an alcove near the door. On the wall behind it are cheap cardboard pictures of saints – religious kitsch though not lacking in pathos – souvenirs from a trip to Mexico. Apology says that the juxtaposition of saints and telephone confessional is coincidental. Nevertheless, the saints add a flavor of religiosity to the project. When a call comes in, the answering device flashes a red light, and the light produces a kind of halo effect, bathing the saints in a spiritual glow.

The ritual is reminiscent of the *son et lumiere* productions held at French chateaux for summer tourists. First the ring of the telephone, Apology's spiel (**Hello, this is Apology. Apology is not associated with the police or any other organization, but rather is a way for you to tell people what you have done wrong and how you feel about it. All statements received by Apology will be played back to the public, so please do not identify yourself. Talk for as long as you want**), and the illumination of the saints. Then the caller's voice, remote but urgent.

I want to apologize for some of the misdeeds I've done. But they don't make up for the misdeeds that were done me.

Apology sits transfixed, his concentration total. A half smile flits across his face. It is a smile of satisfaction – the satisfaction of a sociologist whose data far exceeds his wildest dreams. And a smile of self-consciousness – the shame of a small boy eavesdropping on grown-up secrets.

I do believe that what is given is returned. I know that I've had problems. I really don't think I'm that much to blame considering the society we live in. We live in a very aggressive society where hopefully the better man wins. Survival of the strongest . . . I apologize for society being aggressive. But you're using this tape to promote yourself. It's your ego trip.

The voice fades abruptly. The caller hangs up, the red light dims, the saints recede into the shadows. Apology lights a cigarette, laughs a nervous laugh.

He keeps a log of all the phone calls; he seems to know them intimately. If a caller requests it, he will call him back to converse. The taped monologues evoke his deepest feelings.

Yet he is curiously dispassionate, his approach more that of a scientist than a sculptor. He does not have advice, or "answers."

"I explain that I'm a person, not a professional. I listen and tell them just what I'd tell a friend asking me about a problem. Sometimes it's very frustrating because I realize there's no way I can help – I just don't know what to say. I just try to talk to them the way I talk to anybody, in a reasonable sort of way."

What's your name? What's your name? Tell the people who you are. What's your name? I won't talk to you until you tell me what your name is. Give me your name, for Chrissake. My name is John Brandt. You can call me at 555-1918. You call me and tell me what your name is. I want to know what your name is. Then maybe you'll get an apology.

Like his callers, Apology remains anonymous. Not only because his telephone experiment has brought him death threats. The spirit of the project is anonymous. **When you call you will be alone with a tape recorder**. Apology is only a voice at the end of the telephone.

more →

Apology's installation, Fall 1981, at the New Museum on Fifth Avenue in Manhattan, New York. People stepped into one of the four telephone booths to hear the recorded apology tapes played continuously through the handsets. Apology played back 1800 calls recorded on thirty hours of tape.

BIG BROTHER – Let it be known that there are terrorists out after your ass. Those tapes have to be destroyed.

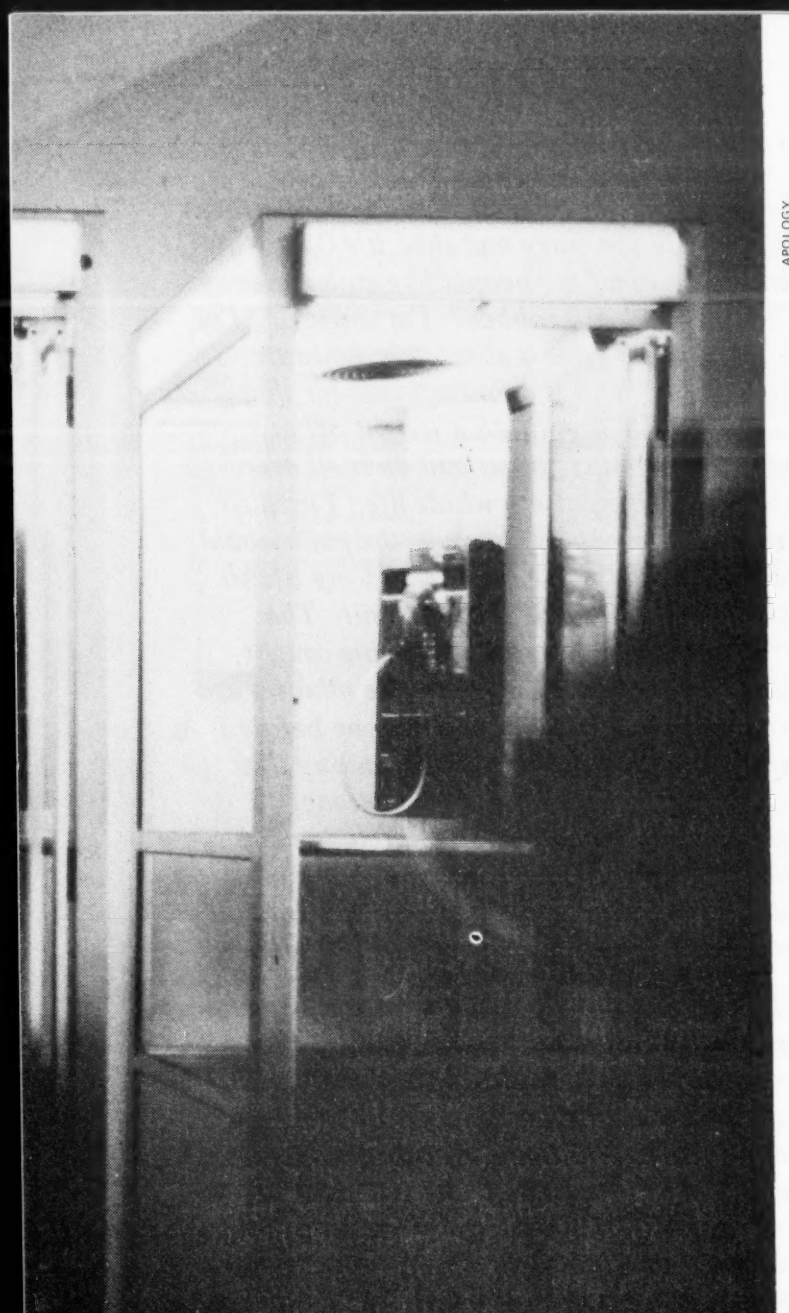
Apology considers his tell-all call-in art, and intends eventually to play the tapes in public at a gallery or art space. He calls it simply a "telephone piece" in which he explores themes of guilt and punishment.

Is this "guilt art"? The artist acknowledges that the notion of sin is crucial to the project. "I call it Apology because whoever calls in has to recognize the fact that what they've done on some level is wrong – otherwise they wouldn't be calling Apology."

And there is absolution – of sorts. "I find that no matter how weird or violent or how low-life it is I can usually find something in my own experience or memory that's in some way parallel – even though some of the things are pretty gross."

First of all, there's my cousin Louise. I raped her when she was nine, ten years old. I'm sorry Louise, I realize I shouldn't have done it. I was 19 at the time . . . Well, let's see, there's Henry. I killed Henry. He was a neighbor, a classmate of mine. It was in the woods. I hit him over and over again with a rock. In a way it was his fault because he shouldn't have kept teasing me about the size of my ears. They found his body, of course. Oh, he had a nice funeral. It was in the papers and everything. They kept looking for the killer but they never found that person . . . .

"Part of the idea is to give people from the underneath part of society a voice," explains Apology. "Anyone who has done something wrong and can't



tell anyone about it is isolated. One man put it that 'If you're a criminal you're in a kind of red-light zone. You have no voice.' "

I'm a homosexual, and I would like to apologize to my family because I think I've hurt them a lot. I just want to say I'm sorry for running away.

Indeed, most of the callers seem to live in some sort of "red-light zone," whether or not they are criminals or have done wrong.

I WANT TO APOLOGIZE because I broke the town hall windows, I broke the windows on the back of a store in town. I'm sorry about harassing the Republican officials, about making the bomb threats. I'm sorry about the terrorists, making the fire bombs. I'm sorry about the way I'm calling now – on a phony credit card . . . I'm 16 years old. I'm going to juvenile home for a pretty long time. I'm sorry for disturbing a lot of people, for causing pain to my family. I feel so sad. I'm sick, I'm sick about it.

Like those who write to Dear Abby, Apology's callers are often looking for a phantom shoulder to cry on. But there the similarity ends. Abby's advice seekers have faith in her infinite wisdom and in her quickie solutions doled out in snappy paragraphs for the eyes of the whole world. Apology's confessors see their sins as unpardonable, thus unprintable: secrets that can barely be muttered into the dark void of the telephone.

I'm 14 years old and I got this girl Lois pregnant. I don't know how I got her pregnant. I don't care.

"A telephone is everywhere, ubiquitous," notes Apology. "A person speaking on a telephone is hidden. A person can call from Kalamazoo or someplace and not tell me who he is or where he lives. And he's not even talking to me. He's talking to a tape recorder. The combination of the technical aspects of the telephone and the anonymity promotes intimacy. People say really incredible things."

I MURDERED MY MOTHER. I need help. Please call me at 555-9966. I know I did something terribly wrong. I threw her out the window. You should have seen her – she went right through that thing, and I could have screamed so hard. She bit my little brother.

"The range of reactions is extremely broad," says Apology. "A certain proportion of calls reveal secrets which the caller has not revealed to anyone else. Many people apologize about messing up their own lives as well as other people's lives. There's always a certain amount of sexually related material that comes in. Some of it's very, very believable, some of it's a joke, and some of it's in the gray area – you just don't know. And I've had a small percentage of out and out nut cases."

I killed a man, when my boyfriend was robbing a drugstore. We went to the hospital, and they said he was dead.

The types of calls he receives, says Apology, depend largely on where the caller found out about him. Since displaying 1200 posters throughout the streets of Manhattan, his electronic confessional has received far-ranging publicity from radio and newspapers, which in turn has brought in calls from places as far away as Calgary, Canada.

"The posters brought in predominately street-criminal calls. The male-female ratio was about five to one. The calls were from street muggers, toughs of various kinds, a certain revolutionary type, people who whispered about the mob, hit men."

Another huge wave of calls came after an item about Apology appeared in **The Weekly World**

News, a supermarket tabloid. "That brought in calls from women all over the country. For some reason it only brought in women."

I'm calling from California. It's three o'clock in the morning. I'm at my wits' end. I don't know what to do. My husband left me 12 years ago for no real reason other than just the usual pressures of life. I came 3000 miles away from Greenwich, Connecticut, and from my birthplace, Portchester, New York. But since I got here we've had nothing but adversities. My children have met nothing but the scum of the earth. I know we're all God's children, but some have just dragged in the gutter . . . I know this could be used against me – but we had a close-knit family in Porchester. My father was at one time a key citizen in the town. Not that that's so great but he was a hard-working man; he went to school with Ed Sullivan. I'm name-dropping but I don't know what else to do. We came out here and met – garbage. They steal things out of the apartment . . . .

This woman, like many others, spoke in a rambling, disjointed singsong, a monologue in which the telephone functioned as a prop. "We the listeners hear these things and ask ourselves if this is a true statement or if this person is fantasizing or joking, or whatever. But you just have to rely on your own sensitivity, experience, memory, to decide whether something is believable or not and get out of it what you can. It really calls on the listener's psychic resources."

I called up yesterday because I killed a man. I called back because I want to explain the situation. I feel my own crime was his fault in a way. The guy I shot – I shot him twice in the chest. He was like dead on arrival. The guy was a fucking B ripoff artist. He ripped people off with B heroin. He was also a rapist. He raped this girl, a neighborhood girl. I don't feel I need to make an apology in this situation. I was never into ripping off. I never hurt anyone. I just carry a piece in self-defense. I never hurt anyone.

"It's an odd work of art in the sense that normally the artist would be the person calling in, but in this case the artist is the person just setting up the system and compiling tapes, logging tapes, while the most creative material is actually coming from the caller. The inner feelings, and so forth, are the callers'. I'm just evoking it," says Apology.

PERHAPS THE MOST DISTURBING messages Apology has received are death threats. One of the most elaborate of these came from a rapist and thief who identified himself as Bernie.

Do I just say 'I'm sorry' and apologize for all the bad things I've done? The opportunity you've given me to apologize and tell people I'm sorry is fantastic. Because then I don't feel guilty anymore and I can start doing things again, right? In other words I can say I'm sorry and then it's OK. How do I apologize to all the people I've stolen money from and mugged and robbed? I'm sorry . . . I'm sorry . . . . Oh boy, this is absolutely fantastic. I feel better now. This is a fantastic service that you're doing. Oh boy, that's a weight off my shoulders. Now I can go out and do it all over again. You've changed my whole life. I used to try not to do these things because the guilt would be eating me up. But you've changed my life so now I can commit crimes without guilt. The danger of it all, being caught, not being caught, having that $100 you didn't have five minutes ago . . . I've never said I'm sorry to someone before I murdered him. The person who is running this service, the person who answers the phone – I will find out who you are and I am telling you right now, I'm sorry but I'm going to kill you. I'm sorry. You know, a lot of people live their lives and don't do any good at all in the world.

You at least will know that you've made one person happy. Isn't that worth a lifetime? To have made one person truly happy? Your death will make me happy . . . . When you least expect it, when everything seems calm, your death will come. I'll say to you, 'Bernie, telephone call,' and you'll know. I'm telling you right now that I'm sorry because there won't be time – later. . . . There would be a lot more people doing what I do if all they had to say was 'I'm sorry' for what they did. You're an absolutely fantastic person. And you're going to make me very, very happy when I kill you.

"This one is fascinating," remarks Apology, despite his anxiety that Bernie may suddenly turn up at his doorstep. "This guy, whether he's serious or just a good actor, has psyched out the social-moral implications of the project. It's the same basic criticism that people level at Catholic confessions. Just go in and confess and you don't have to feel guilty about it. That, of course, is the basic flaw of the notion of confession with no penalty."

WHEN I WAS FOUR YEARS OLD I knew a boy named Phillip who was seven. One day Phillip and I were walking around in the woods near the apartment where I spent my first seven years and Phillip asked me if I knew what "fuck" meant. I said no. So he said come back here in the bushes. We were in the bushes off the roadway and he said drop your pants. So I dropped my pants down. He dropped his pants down. Phillip came up behind me and pressed his penis up against my ass. Of course he was only seven years old so nothing much went on. I think he probably urinated against my ass. Then he asked me if I wanted to do it and I wasn't sure if I wanted to or not. I stood there behind him trying to figure out what I

Mr. Apology in disguise, with his Crime Time machine. The Choice lever is the dark stick at upper left poking through a hole in the box. You can also see the Hole of Jeopardy, the tube through which the guilty stick their hands, and the larger Wheel of Fate to its left, which spins to determine if that hand gets locked into the machine.

CARL GOLDHAGEN

was supposed to do. Now, at this point I don't know where memory ends and fantasy begins. My mother's best friend who was a neighbor drove by in a car and saw us in the woods caught with our pants down, so to speak. At any rate I remember that night sitting at the dinner table feeling an enormous amount of tension and guilt. I think what actually happened was I asked my parents what does the word "fuck" mean and they kind of looked at each other really carefully. I'm not sure if my mother's best friend gave my mother any information. At any rate, I know that after that point my parents asked me not to play with Phillip any more and I don't think I did play with him much. Anyway, that's my deepest, darkest secret. I don't think I've told more than one person in my entire life and I've often wondered how that's affected my life.

This is the only message on Apology's tapes that is not anonymous. One night, while drinking in a bar in lower Manhattan, a friend dared Apology to make a confession of his own. He went to a pay phone and called in his tale of childhood sexual trauma.

The creator of dial-a-confession has other sources of guilt. From the time he was a child of ten, up until almost the age of 30, Apology was a chronic, compulsive shoplifter who went on robbery sprees as often as twice a week, stealing books, records, food, and carpentry tools. Astonishingly, he has no police record.

"I would go into a large hardware store. I would always need tools – I do carpentry, and I love tools, anyway. I might buy something, and steal something. I'd walk out of there and think, I've spent $12 and I have $40 worth of tools.

"I went through a brief period stealing steaks. I had a nice army coat with fishhooks that I'd pin under my armpit. I could just sort of pick up a steak, hold up my arm, and catch it on the the fishhook."

Though he believes his crimes are politically justified – "Americans are pumped up to consume" – Apology acknowledges enormous guilt about his shoplifting. He stopped, he says, at a turning point in his life, when a close friend was killed and he was married (he has since divorced). "I realized that I was destroying my life, and that in my life, as in many others, a lot of behavior is suicidal. People have inner aches and problems and part of the way of dealing with that is by burning holes in their stomachs, punishing themselves. I probably wanted some sort of punishment, punishment from society."

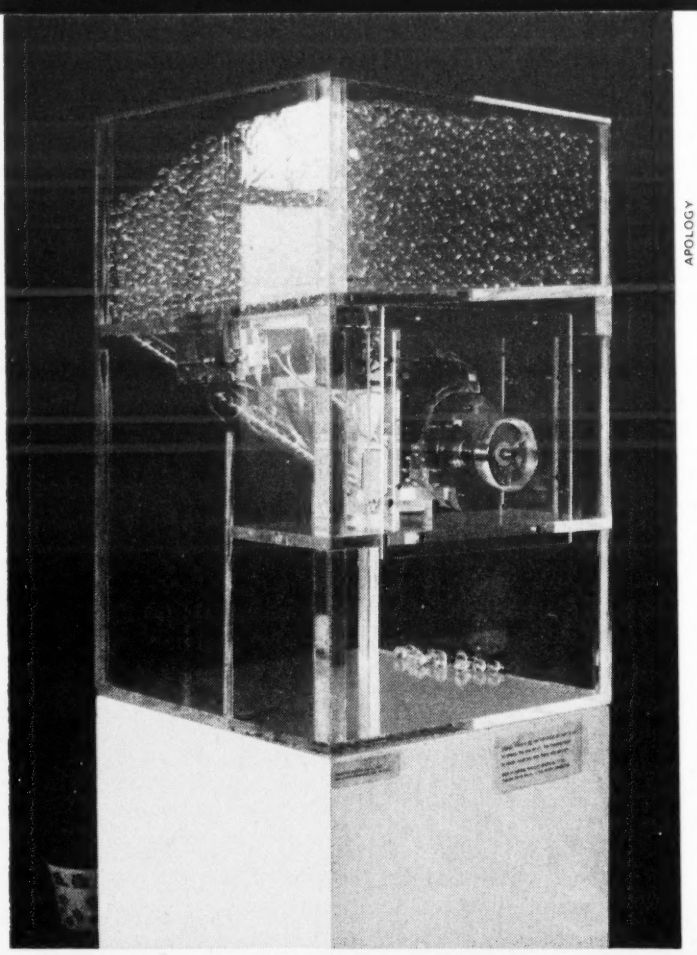
He confronted the guilt in his work. The first sculpture he did after quitting shoplifting was a five-foot-tall lucite machine sculpture titled Crime Time: Don't Do the Crime if You Can't Do the Time. "If you looked at this piece as a stranger you wouldn't have any idea that I had shoplifted, but for me it was like putting my experience of shoplifting in material form."

Crime Time is an ingeniously engineered, starkly aesthetic work, a combination party game and "mind game" made plastic. Wholly transparent except for some of its mechanical components, its spinning cogs and wheels signify an ironic justice.

Crime Time operates as follows. The player pushes a lever titled Choice, which unlocks a bar marked Chance, which in turn sets in motion the wheel of Fate. The wheel is studded with an assortment of sins, among them: gluttony, tax evasion, deception, marrying money, cheap thrills, doping, smoking, and of course shoplifting. Next, the player sticks his arm into a hole of Jeopardy, and pushes

another lever which releases a marble – the spoils of the game. Two things may happen. Either the marble falls through to the bottom of the machine, signifying that the player has escaped paying the price for his crime, or the marble drops to the floor, and the player's hand is literally locked in the door of jeopardy for several minutes as he "does time."

Crime Time was the precursor of Apology's telephone confessional; in both pieces the artist grapples with guilt. His next project, he says, will be another telephone piece, which will ask callers to discuss early childhood memories – "painful, embarrassing memories." ■



Another Apology sculpture: Attention Must Be Paid. **Apology wrote: "Wheel always turns clockwise (one revolution takes one week). Task of owner is to turn back wheel at least once a week. This action causes one marble to fall. Failure to turn back wheel causes trap door to open, releasing all marbles at once. Marbles may not be replaced in upper compartment."**

Apology's Postscript

Dear Mr. Kleiner,

Sorry I've been so long in responding, but yes, feel free to run the article by Livia Linden on my Apology project.

Your suicide article (CQ Spring 1981) was very interesting to me in several respects; amongst them that some of the notes did resemble certain Apology calls, and that rules had to be established by the hotlines to prevent overinvolvement by the counselors.

Overinvolvement is a pitfall I try to skirt, but not always with success. Aside from several of my friends who have used the service, I won't meet an "apologist" face to face, although several have wanted very much to meet me or find me. Some were lonely people, some made various propositions, and some criminal types threatened to "get me." The cleverest of the last category is a man who identifies himself as Bernie. In one long, well orchestrated message he first thanked me for giving him the opportunity to apologize for all the bad things he had done, because now he could resume his life of crime with a clear conscience. Next he confessed to murder, rape, and muggings. Finally he apologized to me ahead of time for seeking me out and killing me before the end of the year (1981).

In the fall of 1981 I played back all the messages I had accumulated at the New Museum, 65 Fifth Ave., N.Y.C. I was then faced with the dilemma, "Do I terminate this project now since art pieces have a beginning and end; or have I begun a needed social service for which I am responsible?" This confusion of ends cost me my clarity of purpose. I couldn't bring myself to unplug the machine; but neither could I wholeheartedly proceed with the project. I became depressed.

When New Year's Eve 1981 arrived I felt a special celebration was in order since I had survived the year-long threat of Bernie. Unfortunately my girlfriend M. had to fly to Florida early the next morning and wouldn't go out. I stayed home with her peeved and rather frustrated. That morning as I drove her to the airport I collided with another car. My car was much smaller and we suffered most of the damage. M. sprained her neck and I sprained my back and pinched a sciatic nerve. A painful and depressing winter ensued; a time of dark spirits, self recrimination, and visions of mortality. And I had worked Bernie's curse upon myself.

As I recuperated last winter I became fixed on the idea that my path to physical and spiritual rejuvenation lay in the practice of skindiving, a whole lot of skindiving. By the end of April, M. (newly certified) and I were venturing into the cold Northeastern Atlantic. Since then my whole existence has centered around the problem of how to spend as much time as possible under water. This process culminated this week upon our return from two weeks of intensive diving in the Caribbean. I didn't quite succeed in diving my brains out as I had hoped (see "Suicide" article on risky activities); but I feel great physically and my mind has a peace I haven't felt in years.

In conclusion I must admit that I really don't want to be Mr. Apology for the rest of my life, nor am I well suited for the job. If society needs an anonymous secular confessional, as I believe it does, then it should be run by a group of people with some expertise in law and social sciences. As for me, the artist, I think I will stop *being* it and start doing more with it.

–Apology
New York, New York

Landscape with the Fall of Icarus **by Peter Bruegel.**

MUSÉE DES BEAUX ARTS

About suffering they were never wrong,
The Old Masters: how well they understood
Its human position; how it takes place
While someone else is eating or opening a window or just
walking dully along;
How, when the aged are reverently, passionately waiting
For the miraculous birth, there always must be
Children who did not specially want it to happen, skating
On a pond at the edge of the wood:
They never forgot
That even the dreadful martyrdom must run its course
Anyhow in a corner, some untidy spot
Where the dogs go on with their doggy life and the torturer's
horse
Scratches its innocent behind on a tree.

In Bruegel's *Icarus*, for instance: how everything turns away
Quite leisurely from the disaster; the ploughman may
Have heard the splash, the forsaken cry,
But for him it was not an important failure; the sun shone
As it had to on the white legs disappearing into the green
Water; and the expensive delicate ship that must have seen
Something amazing, a boy falling out of the sky,
Had somewhere to get to and sailed calmly on.

–W.H. Auden

MARGINALIA

One of my very favorite anecdotes of mistake is about the naming of my native state of Washington.

I quote directly from the **World Almanac 1982**, page 460:

> Washington – Named after George Washington. When the bill creating the Territory of Columbia was introduced in the 32nd Congress, the name was changed to Washington because of the existence of the District of Columbia.

As if the name "Washington" would be less confusing.

Tom Robinson
Stanford, California

MALE IMPOTENCE AIN'T SUCH A BAD THING

On my favorite TV program, **The Uncle Floyd Show**, out of Newark, New Jersey, there's a scene where Skippy the clown waves a fat wad of bills under the nose of Uncle Floyd.

"Here's $300 that says you can't guess the first three words that my wife says to me in bed."

"That ain't hard," says Uncle Floyd.

Disconsolate, Skippy hands over the money.

Male impotence performs a number of useful functions. It slows a man down; puts on the brakes, in fact. The man has got to think about foreplay and arousal and technique. And more important, he has to start sorting through his deeper feelings and anxieties, recreating the link between sex and emotion that women seem to lose sight of less frequently. He can realize again that lovemaking doesn't always equal coitus. He can learn or relearn the fact that good sex involves two people acting in response to each other.

And, besides, the erections return.

Sidney Dowd
New Milford, Connecticut

BORN TO FAIL

THOUGH A BIT OF SKILL COMBINED WITH THE PROPER ATTITUDE WILL PROBABLY GET YOU THROUGH

by J. Baldwin

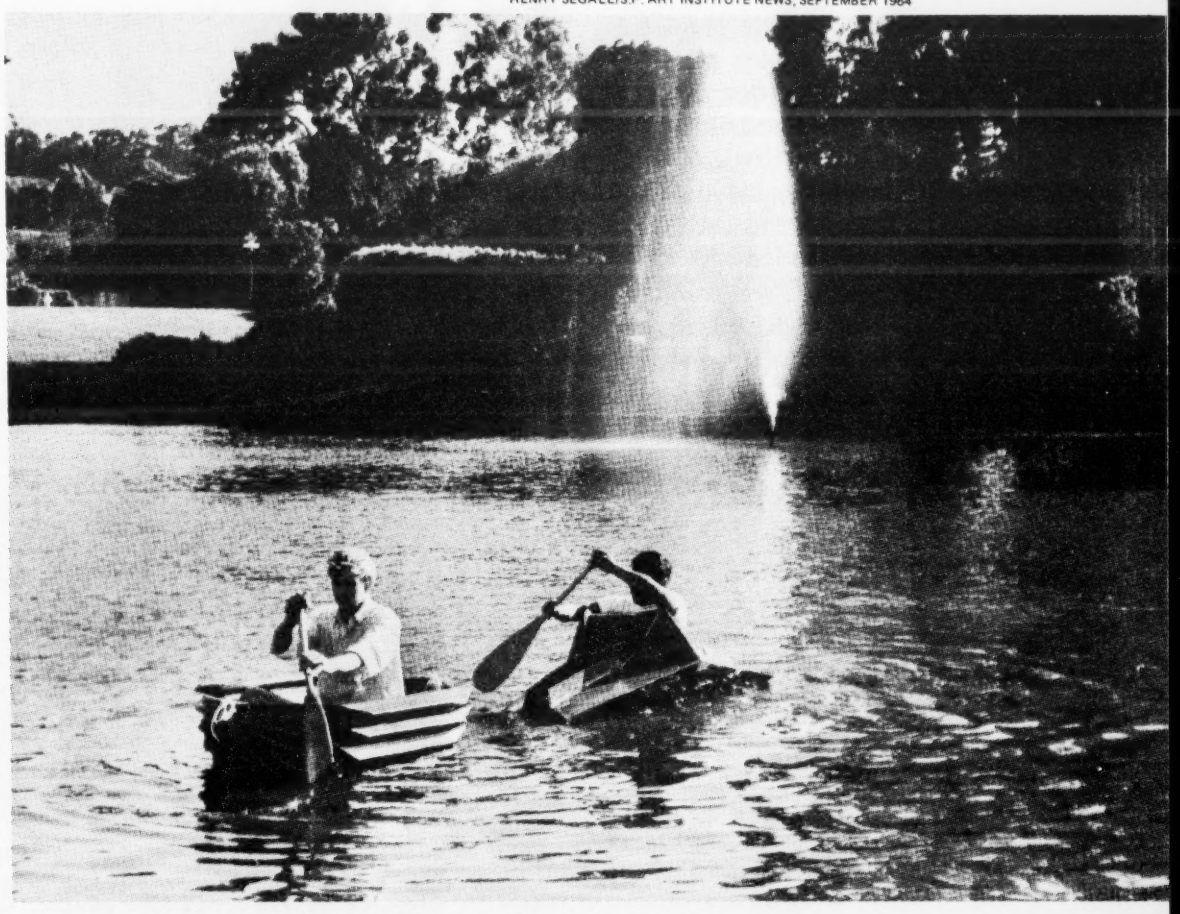
FAILURE is a way of life for designers. We *know* our work is going to exhibit certain undesirable qualities until development is pretty much complete. That's what research and development ("R & D") is all about. That's why we have computer simulations, prototypes, and test pilots. And a junk pile behind the lab. (Or barn. There's nothing formal about any of this.) We learn to live with the possibility that our ideas may not work at all, and that even if they do work, the critics may not receive us kindly. The market might not be there, or a political perturbation might shoot us down. Any way you look at the situation, the potential for miserable failure is there. Statistically, about 90 percent of new designs do not achieve societal (market) acceptance. In the face of these dismal odds, how can designers continue to feel confident enough to work? And how is disaster to be avoided?

HENRY FORD MUSEUM GRAPHICS ARCHIVES

One of Henry Ford's people testing an early version of the Model T on a muddy road, circa 1915. Ford's willingness to work with failure gave the Model T high torque and light weight, which made traction possible on bumpy terrain.

Henry Ford is one of my heroes, mostly because he dared to ignore much of the conventional wisdom of his day. For instance, when he was designing the Model T, his engineers were not issued the expected order to make it as strong and tough as possible so that failure would be unthinkable. Instead, they were told to make it as light as they dared. Then, when it inevitably broke during road testing, they were to beef it up appropriately and test it again. When at last the test car didn't break, Henry knew he had the lightest and most economical car possible at that time. While his competition carted around hundreds and even thousands of useless pounds supposedly needed for strength, the Model T went on to become a deservedly great success, at a weight less than a modern VW. Today, design is primarily for the perceived market niche rather than for physical performance on the road. Consequently, when there is a rapid shift of customer desires, automakers are left trying to sell cars that are inherently not very good – a failure of a different sort.

CQ *readers who don't know J. Baldwin should turn in their* **CoEvolution** *T-shirts. His pungent articles and reviews have graced these pages from the beginning. As I write this, J. is working with the New Alchemists in Massachusetts; as you read this, he's back in California, pawing the ground.* *–Conn Nugent*



Launching day at J. Baldwin's design class, San Francisco Art Institute, summer 1964. Students had to build cardboard boats that would carry them across the Palace of Fine Arts lagoon.

It is interesting to speculate what Henry's press would have been if reporters had been allowed to witness the tests. I can see it now. FREAK CAR CRASHES! FLAMING PYRE MARKS END OF EXPERIMENT! The media have always had a penchant for such things. The public seems eager to hear of anything that doesn't "win"; anything that doesn't work right is accorded derision or at least a dilettantish macabre attention. Corporations hide their work until it is market-ready, not only to confuse competitors but to prevent media "misunderstandings." It is mostly for such reasons that Bucky Fuller admonishes us to never show anyone half-finished work.

There is a way to prevent bad press and the sneers of peers: don't do anything that is likely to have problems right there in front of God and everyone. Carried to an extreme: don't do anything new. Or don't do anything at all. Students seem attracted to this last route. The professors that let them get away with that are obstructing education, but you can see why they do it. For one thing, professors themselves don't care to be exposed to accusations of failure, and poor student performance tends to reflect badly on the teacher. Sure-to-succeed assignments assure that the students will not shame the prof. You won't hear much talk along these lines among students or in the faculty lounge, but the fear-of-failure forces are at work nonetheless, even in an atmosphere where you might not expect to find them.

For instance, I once asked some design students to construct boats that could carry them fully clothed and dry across a nearby pond. The boats were to be fashioned from box cardboard anointed with waterproof paint. I thought it would be a good exercise in that there was no literature to search and no "resource persons" available for advice on the subject. The students would be forced to think for themselves. They'd also get some practice in using materials appropriately (you can't make a wooden boat design out of cardboard), they'd get a chance to see an idea take physical shape under their own hands, and if they didn't sink they'd get a taste of success. After a great deal of teeth-gnashing and some hilarious test sinkings, they produced a fleet. Since the students all faced the same problems, the test sinkings were regarded with amused interest rather than mean laughter and ego-deflating gibes.

On launching day, even though I knew better and despite looking outwardly calm, I was as nervous as a long-tailed cat in a room full of rocking chairs. What if they all sank? What if somebody got hurt? Someone might *sue* me! People in California can get sued for just about anything. Worse, CBS-TV was going to be there. Was I about to be made a public fool along with my students? In many societies, that's a fate worse than death. Well, the launching went fine. Only one boat sank, and it had been rather cleverly made to do so by a gal whose public personality was based on eliciting pity, so we may still claim that one as a success. TV presented us in an acceptable, nonderisive way. It was a great day for all. My mailbag over the years tells me that those students appreciated being put into a position where the "win" was not at the expense of another person. In a sports-oriented society, that's a rare opportunity.

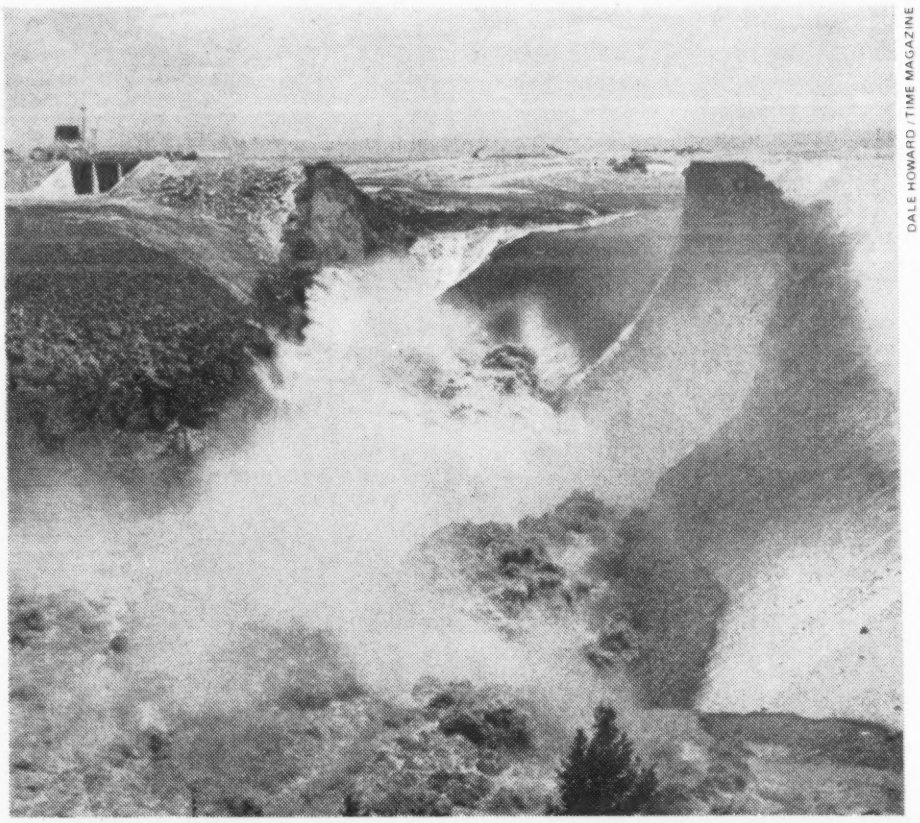
Among my peers, however, there were few who approved of the assignment. With one exception, all who approved were without tenure. The gist of the disapproving remarks was that sorties outside of the classroom were somehow suspect, and that my students had been guilty of doing their bulky projects in space officially designated as "non-curricular." But we got the real message, all right. It was "Don't take chances."

I was enough of a whipper-snapper at the time to be shocked at finding this attitude in a school of creative arts. I began to note that even in beginning art classes, students were graded on whether or not they did "good art." They could fail if they tried something that didn't work all that well. At that time, a male student could fail his way to Vietnam! The results of this policy were predictable: Students faithfully executed art that closely resembled the then-current style, all too often the style in which their professor worked. Students who bravely

attempted innovations generally received poor grades. Their work tended to look ragged – a natural consequence of innovation, because the first of the new is nearly always at a disadvantage when compared to the last of the highly developed old. Needless to say, there was not much failing work produced, especially by the men. There wasn't much new either. There rarely is under such circumstances, even when there is a big prize awaiting a well-taken Bold Move. Witness the sorry display of impotence in Detroit when the very existence of the American automobile industry is at stake. In a real sense, the fear of immediate, laughable, Edsel-type failure precipitates larger catastrophes. These are often seen as the result of mysterious bad luck or malice or ineptitude. They are more often the result of lack of nerve.

Assessing blame for failure is an enterprise closely associated with chance-taking. It's easy to do even if one does not have any idea of what is really going on. It doesn't take a Ph.D. in music to detect when a concert pianist hits a wrong note, and this principle can be effortlessly extended into invalidity. Murphy's Law ("Anything that can go wrong, will go wrong") is often cited to cover mistakes arising from insufficient thought, insufficient information, or sloppy execution of an idea. In my own incarnation as an Industrial Designer, I have never once seen a Murphy's Law failure that was not, in fact, a failure due to pure carelessness. A laid-back, don't-get-uptight attitude combined with an ever-increasing technical complexity make Murphy a popular excuse.

This seems a good place to say that it is probably not possible to make any relatively complex technology absolutely fail-proof. The interactions involved in a nuclear-power plant, for example, are so labyrinthine that there is no way to foresee all possibilities. Computer analysis helps but obviously has not proved to be 100 percent effective at predicting conditions that lead to failures. In such cases all we can expect is (I hope) a reduction of the evil effects of failure – hardly a comforting thought. The only sure preventive measure then becomes "Don't attempt the project in the first place."



DALE HOWARD / TIME MAGAZINE

June 5, 1976: water pours through the newly ruptured Teton Dam, churning up mist and dust. Floods from the disaster inundated Idaho's Snake River Valley and killed nine people. Geologists (including CQ contributor Robert Curry) had predicted the dam would break in 1972, when it was built.

This is different than the student failure-of-nerve cited earlier. It comes after due thought and investigation. A reading of the history of some of the more infamous technical failures, such as the Teton Dam, nearly always reveals that bravado (some say machismo) overrode thoughtful analysis that would have either modified the design or stopped the project altogether. Uninformed courage can be fatal! Failure of "experts" is all too often due to political meddling.

I admit that my own most spectacular failure was, uh, well, I *ignored* something I shouldn't have. I was testing a small sports racing car designed for use on a track. It had three inches of ground clearance. The seat was an anatomically comfortable shape pounded into the belly pan of the car and upholstered with a quarter-inch of foam and leather. The three-inch ground clearance was measured under the bulges hanging down beneath the main floor line. What I had ignored was what would happen if a tire blew or a wheel came off. That wasn't on my mind when I was striving to get the car as low as possible. In trying to be very clever, I had not thought out all aspects of the situation. When a steering part snapped, the car dropped to the pavement and the bottom of the seat bulge zizzed along the shoulder as I fought the car down from 90 or so. We stopped, enveloped by an evil-smelling smoke comprising foam, leather, and fried ass. I've thought things out with assiduous discipline ever since, and have not had to invoke Mr. Murphy again. (I also have my welds x-rayed.) For a long time after that I tended to be conservative rather than smarter and more careful. (There's a difference.) I got bored being conservative.

I'm sure you can think of instances where avoidance of immediate failure can lead to later failure. As with my car, the later failures tend to be things we didn't think of or didn't want to think of. Much of the environmental degradation seen today has come from folks trying to avoid, say, a market failure. They worry about that so much that they don't consider what their actions are going to do in the long run, especially to the environment, which is not a

paying customer. Yet over and over I've seen manufacturers stoutly oppose environmental laws affecting their businesses even when compliance would result in extra profit. I think this happens because the people involved are causing failures in "another department," one with which they are not familiar. The phenomenon reminds me a bit of Thomas Kuhn's "paradigm shifts" in that there is not as yet a meta-language that enables people in one field to talk meaningfully to those in another. Money does not talk usefully when one is discussing environment, though business people often try and force it to.

All this chat adds up to most failures being preventable. Oh yes, there will always be just plain bad luck – after all it is possible to roll snake eyes a thousand times in a row on honest dice. And sometimes failures come from Forces Beyond Our Control. But, unlike kilo-snake eyes, usually not. If you really think things through, even to the point of checking things out in bailwicks other than your own, and if you don't worry too much about people laughing at you, and if you do your work carefully, you'll probably do okay. At least you won't have failed in the worst way possible: seeing something go down because of insufficient effort or courage. ■

The great Melville wipe-out

In the summer of 1981, Nancy Grant and I bicycled from Vancouver, B.C. to Boston. We guided ourselves with maps folded under the transparent covers of our front packs.

On July 23, we rode into Melville, Saskatchewan. I looked down at my map to find the best way out of town, and ran directly into a parked car. It took six stitches at St. Joseph's Hospital to re-begin the journey.

"The map is not the territory . . . ."

Birrell Walsh
San Francisco, California

Gossamer Odyssey

One of the very worst things about Technology is the ubiquitous "they" that appears in nearly every discussion of accomplishment. They went to the moon. They can do eye surgery with lasers now. And now they flew the English Channel in a pedal-powered aircraft (the Gossamer Albatross). Gee whiz! But also oh dear, for how did they do that? I couldn't, could I? Or anything like that? Those folks are magicians-strange-better somehow. And most media makes them even more that way.

Well, this time we luck out. A man on the Gossamer team has written an account that is not only historical but absolutely sings of the way it got done. Morton Grosser sings of innumerable crashes, some after a mere ten seconds in the air. He sings of sneers and quarrels, though not with the leer of the Queen's chambermaid revealing all in the Weekly Spoonbender. He shows us the process by which a small group of folks grew into the task with humor, skill, and sass. I recommend this book to everyone engaged in a true challenge, technical or otherwise. My experience has been that this is how it goes. And it's a great story, too. —J. Baldwin

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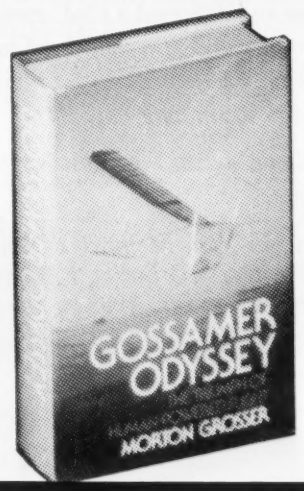
On its fifth tuning flight at Shafter that morning the plane had crashed again, this time because of a genuine error. Despite the tightened-up safety program, one flying wire end fitting, about the size and shape of a paper clip, had been missed when the plane was checked over. The fitting opened in flight, the wire slipped off its anchor on the outboard starboard wing spar, and the spar broke. The right wing folded up, crumpling the leading edge and three ribs. The fuselage frame and one propeller blade were also broken when the plane hit the runway. This time, however, there were no injuries, and, more important, the team's response was aggressively upbeat. *Fix it and get flying again* was the mood; it felt like the old days.

Gossamer Odyssey
Morton Grosser
1981; 298 pp.
$15.95 postpaid from:
Houghton Mifflin Co.
Wayside Road
Burlington, MA 01803



BOX 428 SAUSALITO CA 94966

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By mid-Channel the flight was far behind schedule. Bryan Allen was low on water, the instrument batteries were failing, and the plane began to sink lower and lower. At 06:26 Allen signaled that he had to give up and wanted a tow. When he climbed higher to clear the rescue boat he found smoother air and decided to go on.

More than two hours into the flight, with cramped legs and a fogged cockpit, Bryan struggles on toward the coast of France.

POETRY AND MARRIAGE:

THE USE OF OLD FORMS

by Wendell Berry

THE MEANING OF MARRIAGE begins in the giving of words. We cannot join ourselves to one another without giving our word. And this must be an unconditional giving. The promise must be absolute, for in joining ourselves to one another we join ourselves to the unknown. We can join one another *only* by joining the unknown. We must not be misled by the procedures of experimental thought: in life, in the world, we are never given two known results to choose between, but only *one* result that we choose without knowing what it is.

Marriage rests upon the immutable *givens* that compose it: words, bodies, characters, histories, places. Some wishes cannot succeed; some victories cannot be won; some loneliness is incorrigible. But there is relief and freedom in knowing what is real; these givens come to us out of the perennial reality of the world, like the terrain we live on. One does not care for this ground to make it a different place, or to make it perfect, but to make it inhabitable and to make it better. To flee from its realities is only to arrive at them unprepared.

Because the condition of marriage is worldly and its meaning communal, no one party to it can be solely in charge. What you alone think it ought to be, it is not going to be. Where you alone think you want it to go, it is not going to go. It is going where the two of you – and marriage, time, life, history, and the world – will take it. You do not know the road; you have committed your life to a way.

In marriage as in poetry, the given word implies the acceptance of a form that is never entirely of one's own making. When understood seriously enough, a form is a way of accepting and of living within the limits of creaturely life. We live only one life, and die only one death. A marriage

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Wendell Berry reminds me of the great men of the old Roman Republic. He finds no contradictions among verse, prose, and the calling of a farmer-citizen. On the contrary. He speaks on behalf of ancient integrations of worship, work, art, and life on the land.

I first saw Wendell Berry at a conference in Western Massachusetts last year. The conference was a memorial to E.F. Schumacher, and it struck me that some of the speakers, and most of the audience, were engaged in a show of public self-congratulations (crucial insight this, seminal moment that) that might have offended Schumacher himself, a man who didn't duck difficulty and the possibility of error. Luckily, Wendell Berry rose and delivered a kind, evenvoiced reminder that revolution is dangerous and that love and social improvement emanate from humility and persistent hard work. He spoke then of the richness of inherited forms, of marriage in particular, and of the satisfying freedoms derived from assumed limitations. It was a wonderful, even a brave talk, and I'm pleased to see its themes treated in depth here.

When The Rolling Stones released ***Let It Bleed****, they wrote on the album sleeve: Play This Record Loud. And they were right. Let me ask a similar favor of you. Read This Article Slow.* *–Conn Nugent*

Wendell Berry's books include ***The Unsettling of America*** *(NWEC p. 46),* ***The Memory of Old Jack*** *(NWEC p. 75),* ***The Gift of Good Land*** *(CQ Spring 1982, p. 46), and* ***A Part****, a book of poetry (CQ Spring 1982, p. 124). "Poetry and Marriage" will be part of his new book of essays,* ***Standing by Words****, to be published in Fall, 1983 by North Point Press, 850 Talbot Avenue, Berkeley, CA 94706.* *–Art Kleiner*

cannot include everybody, because the reach of responsibility is short. A poem cannot be about everything, for the reach of attention and insight is short.

There are two aspects to these forms. The first is the *way* of making or acting or doing, which is to some extent technical. That is to say that definitions – settings of limits – are involved. The names *poetry* and *marriage* are given only to certain things, not to anything or to everything. Poetry is made of words; it is expected to keep a certain fidelity to everyday speech and a certain fidelity to music; if it is unspeakable or unmusical, it is not poetry. Marriage is the mutual promise of a man and a woman to live together, to love and help each other, in mutual fidelity, until death. It is understood that these definitions cannot be altered to suit convenience or circumstance, any more than we can call a rabbit a squirrel because we preferred to see a squirrel. Poetry of the traditionally formed sort, for instance, does not propose that its difficulties should be solved by skipping or forcing a rhyme or by mutilating syntax or by writing prose. Marriage does not invite one to solve one's quarrel with one's wife by marrying a more compliant woman. Certain limits, in short, are prescribed – imposed *before* the beginning.

The second aspect of these forms is an opening, a generosity, toward possibility. The forms acknowledge that good is possible; they hope for it, await it, and prepare its welcome – though they dare not *require* it. These two aspects are inseparable. To forsake the way is to forsake the possibility. To give up the form is to abandon the hope.

A certain awesome futurity, then, is the inescapable condition of word-giving – as it is, in fact, of all speech – for we speak into no future that we know, much less into one that we desire, but into one that is unknown. But that it is unknown requires us to be generous toward it, and requires our generosity to be full and unconditional. The unknown is the mercy and it may be the redemption of the known. The given word may come to appear to be wrong, or wrongly given. But the unknown still lies ahead of it, and so who is finally to say? If time has apparently proved it wrong, more time may prove it right. As growth has called it into question, further growth may reaffirm it.

A wedding photograph by James Van Der Zee in New York in the 1920s. Reprinted from Wedding by Barbara Norfleet (1979; Simon and Schuster), a collection of wedding photographs since 1850.

These forms are artificial; if they exist they have to be made. Sexual love is natural, but marriage is not. The impulse to sing is natural, but language and the forms of song are not.

These forms are also initially arbitrary, because at the outset they can always be argued against. Until the wedding vows are said, the argument that one might find a better spouse has standing because there is no argument or evidence that can be produced against it; statistical probability would seem to support it: given the great number of theoretically possible choices, one *might*

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make a better choice. The vows answer that argument simply by cloture: the marriage now exists beyond all possibility of objecton. A vow, Beatrice says, in **Paradiso V**, "is never canceled save by being kept . . . ," and must not be changed or broken on one's own judgment, though her stricture does not apply to vows that are foolish or perverse like those of Jephthah and Agamemnon.

Similarly, before the poem, there is no necessity governing the choice of form. Why **The Faerie Queene** should have been written in Spenserian stanzas is an unanswerable and probably a pointless question. All we can do is acknowledge that it *is* so written, and go on to questions that are answerable.

The forms, then, are arbitrary *before* they are entered upon. Afterward, they have the same undoubtable existence and standing as the forms of an elm or a river. A poet such as Spenser evidently entered upon the form of a poem as solemnly as he entered upon any other cultural form – that of public service, say, or that of marriage. He understood it both as enablement and as constraint, and he meant not to break it, for in keeping the form he did not merely obey an arbitrarily imposed technical requirement, but maintained his place in his cultural lineage, as both inheritor and bequeather, which saved him from loneliness and enabled him to mean – as witness his filial apostrophe to Chaucer in **The Faerie Queene**:

> through infusion sweete
> Of thine owne spirit, which doth in me survive
> I follow here the footing of thy feete,
> That with thy meaning so I may the rather meete.
> (IIII.II.34)

(Though my concern here is with *making*, I should point out that the reader of a poem also participates in its form and in the community it makes, and precisely as Spenser says: by following the footing of the poet's feet.)

Arbitrary in the choosing, these forms, once chosen and kept, are not arbitrary, but become inseparable from our definition as human beings. But the decision to break them is again arbitrary, for it cannot be based on any sufficient argument or evidence. And this decision does not return us to the state (perfectly inhabitable and respectable) that we were in before we chose the form, but throws us into a state of formlessness, which is painful and dangerous, and which we can escape only by a return to form. The choice of a form is rightly solemn, both because of the gravity of the responsibility to keep it and because of the danger of failing to keep it. This choice does not present itself in any way that we may safely take less than seriously. To have a life or a place or a poem that is formless – into which anything at all may, or may not, enter – is to be condemned, at best, to bewilderment.

It is often assumed, as if under the influence of the promises of advertisements, that need or desire, ambition or inspiration may proceed straight to satisfaction. But this is false, contrary to the nature of form and the nature of discipline, as it is to common experience. It may sometimes happen by chance, but it does not dependably happen by chance. When it happens by luck, it will generally be found to be the luck of the well-prepared. These impulses dependably come to fruition only by encountering the resistances of form, by being balked, baffled, forced to turn back and start again. They come to fruition by error and correction. Form is the means by which error is recognized, and the means by which correctness is recognized.

There are, it seems, two Muses: the Muse of Inspiration, who gives us inarticulate visions and desires, and the Muse of Realization, who returns again and again to say, "It is yet more difficult than you thought." This is the muse of form.

The first muse is the one mainly listened to in a cheap-energy civilization, in which "economic health" depends on the assumption that everything desirable lies within easy reach of anyone. To hear the second muse one must move outside the cheap-energy enclosure. It is the willingness to hear the second muse that keeps us cheerful in our work. To hear only the first is to live in the bitterness of disappointment.

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SAMUEL COOPER STUDIO

A photograph taken in Brookline, Massachusetts, in the 1950s. Reprinted from Wedding by Barbara Norfleet.

It is true that any form can be applied with a stupid rigidity. It can be falsely exclusive, consigning all that it cannot contain "to cold oblivion," as Shelley wrongly believed marriage was supposed to do. A set verse form can, of course, be used like a cookie cutter or a shovel, including and excluding arbitrarily by its own rule. But a set form can be used also to summon into a poem, or into a life, its unforseen belongings, and thus is not rigid but freeing – an invocation to unknown possibility.

Form, crudely or stupidly used, may indeed be inimical to freedom. Well used, it may be the means of earning freedom, the price of admisson or permission, the enablement to be free. But the connection may be even closer, more active and interesting, than that; it may be that form, strictly kept, *enforces* freedom. The form can be fulfilled only be a kind of abandonment to hope and to possibility, to unexpected gifts. The argument for freedom is not an argument against form. Form, like topsoil (which is a form), empowers time to do good.

Properly used, a verse form, like a marriage, creates impasses, which the will and present understanding can solve only arbitrarily and superficially. These halts and difficulties do not ask for immediate remedy; we fail them by making emergencies of them. They ask, rather, for patience, forbearance, inspiration – the gifts and graces of time, circumstance, and faith. They are, perhaps, the true occasions of the poem: occasions for surpassing what we know or have reason to expect. They are points of growth, like the axils of leaves. Writing in a set form, rightly understood, is anything but force and predetermination. One puts down the first line of a pattern *in trust* that life and language are abundant enough to complete it. Rightly understood, a set form prescribes its restraint to the poet, not to the subject.

Marriage too is an attempt to rhyme, to bring two different lives –within the one life of their troth and household – periodically into agreement or consent. The two lives stray apart necessarily, and by desire come together again: to "feel together," to "be of the same mind." Difficult virtues are again necessary. And failure, permanent failure, is possible. But it is this possibility of failure, together with the formal bounds, that turns us back from fantasy, wishful thinking, and self-pity into the real terms and occasions of our lives.

It may be, then, that form serves us best when it works as an obstruction to baffle us and deflect our intended course. It may be that when we no longer know what to do we have come to our real work, and that when we no longer know which way to go we have begun our real journey. The mind that is not baffled is not employed. The impeded stream is the one that sings.

In this way the keeping of the form instructs us. We had been prepared to learn what we had the poor power to expect. But fidelity to the form has driven us beyond expectation. The world, the truth, is more abounding, more delightful, more demanding than we thought. What appeared for a time perhaps to be mere dutifulness, that dried skull, suddenly breaks open in sweetness – and we

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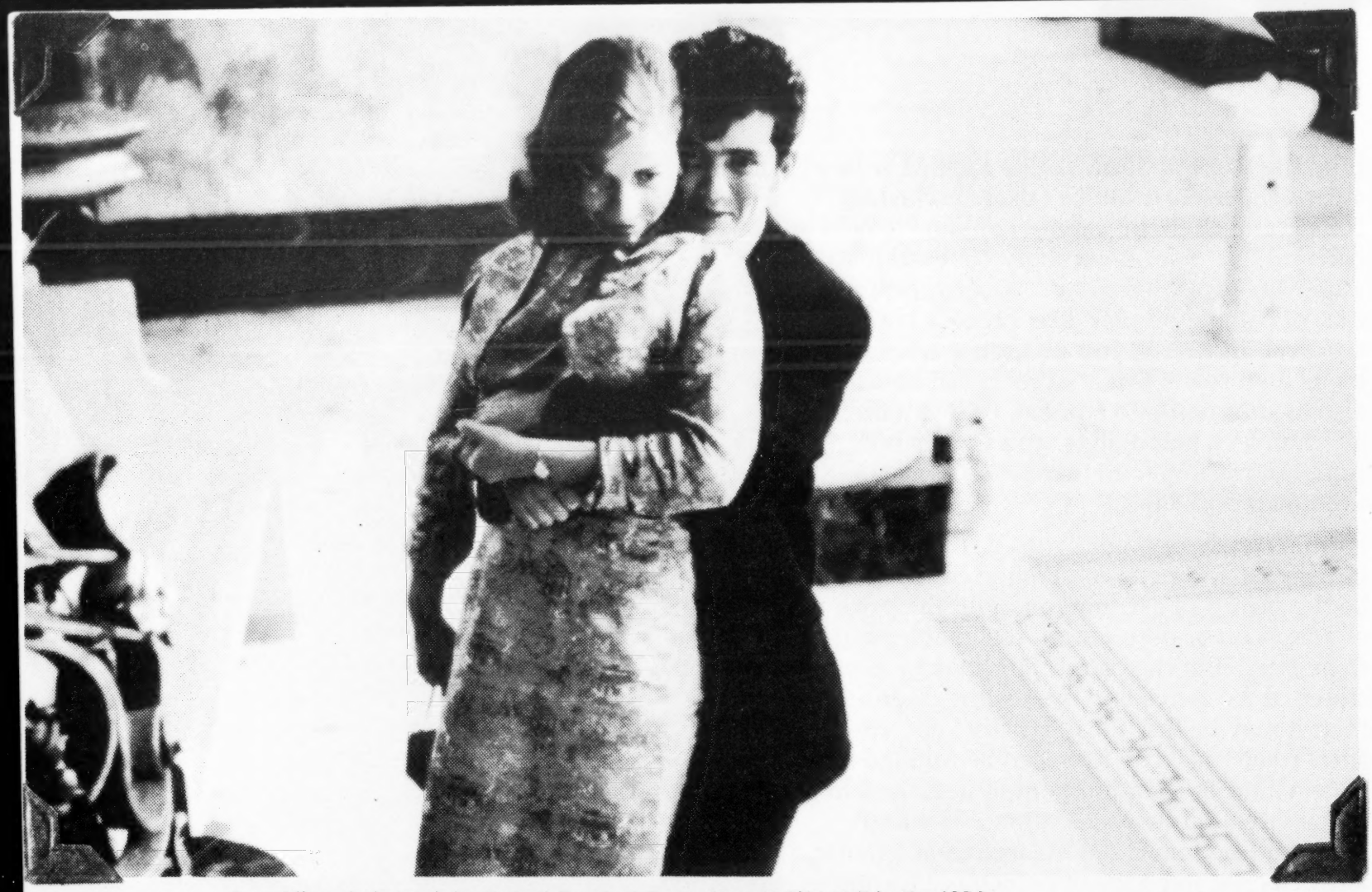

ROBERT FRANK/THE AMERICANS

A wedding photograph by Robert Frank at Reno, Nevada City Hall in the 1950s.

are not where we thought we were, nowhere that we could have expected to be. It was expectation that would have kept us where we were.

In **Taking The Zen Path**, Robert Aitken Roshi says: "It is not unusual to find true resonance with a so-called advanced koan in just a single dokusan, though often more time is necessary, and sometimes one gets stuck, and must stay there for a while." That necessity to "stay there for a while" is the gist of the meaning of form. Forms join us to time, to the consequences and fruitions of our own passing. The Zen student, the poet, the husband, the wife – none knows with certainty what he or she is staying for, but all know the likelihood that they will be staying "a while": to find out what they are staying for. And it is the faith of all of these disciplines that they will not stay to find that they should not have stayed.

That faith has nothing to do with what is usually called optimism. Not everything that we stay to find out will make us happy. The faith, rather, is that by staying, and only by staying, we will learn something of the truth, that the truth is good to know, and that it is always both different and larger than we thought.

The exploiter and the Shelleyan romantic (who are often the same person) are always in flight from consequence, the troubles of duration. The religious disciple, the husband and wife, the poet, like the true husbandman, accept the duration and effort, even the struggle, of formal commitment. They must come prepared to stay; if they mean to stay they will have to work, and they must learn the difference between good work and bad – which is to say that the capability of good work must be handed down from old to young.

The filial piety of Spenser, following the footing of the feet of Chaucer, has its opposite in the character of Michael in Eliot's **The Elder Statesman**, who longs to be fatherless in a present "freed" from the past, so that his name will be, as we say, "just a word":

> I simply want to lead a life of my own,
> According to my own ideas of good
> and bad,
> Of right and wrong. I want to go
> far away
> To some country where no one has heard
> the name of Claverton . . .

We will find that dream of escape in Shelley, who would be surprised – though *we*

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should not be – to discover that what Michael wants to do with his freedom is

> to go abroad
> As a partner in some
> interesting business . . .
> Import and export,
> With opportunity of profits both ways.

Part of the nature of a form seems to be that it is communal – that it can be bequeathed and inherited, that it can be taught, not as an instance (a relic), but as a way still usable. Both its validity and its availability depend upon our common understanding that we humans are all fundamentally alike.

Forms are broken, usually, on the authority of the opposing principle that we are all fundamentally or essentially different. Each individual, each experience, each life is assumed to be unique –hence, each individual should be "free" to express or fulfill his or her unique self in a way appropriately unique.

Both the communal and the individual emphases can be carried to extremes, and the extremity of each is loneliness. One can be lonely in the totalitarian crowd, in which no difference is perceived or tolerated; and one can be lonely in the difference or uniqueness of individuality in which community is repudiated.

The whole range of possibilities can be exemplified within language itself. It is possible to speak a language so commonized by generality or jargon or slang that one's own mind and life virtually disappear into it. And it is possible to speak a language made so personal by contrivance, affectation, or slovenliness that one makes no sense. Between the two are the Confucian principles dear to Pound, of fidelity ("The man . . . standing by his word") and sincerity (*precise* speech: words that can be stood by).

This word-keeping, standing by one's word, is a double fidelity: to the community and to oneself. It is the willingness of difference both to represent itself and to account for itself. The individual is thereby at once free and a member. To break one's word in order to be "free" of it, on the other hand, is to make and enforce a damning equation between freedom and loneliness.

The freedom that depends upon or results in the breaking of words and the breaking of forms comes, I think, from a faith in the individual intelligence, in "genius," as opposed to a faith in the community or in culture. Belief in culture calls for the same disciplines as belief in marriage. It calls, indeed, for *more* patience and *more* faith, for it requires dedication to work and hope of more than a lifetime. This work, as I understand it, consists of the accumulation of local knowledge *in place*, generation after generation, children learning the visions and failures, stories and songs, names, ways, and skills of their elders, so that the costs of individual trial-and-error learning can be lived with and repaid, and the community thus enabled to preserve both itself and its natural place and neighborhood.

I do not mean that the rebellions of genius are necessarily bad; they may be both inevitable and indispensable. But they *can* be bad; they are dangerous, and it is prudent to understand what their dangers are. We may be properly suspicious of them when they are carried out in the name of "personal freedom" or "personal fulfillment," and when their program is a general rebellion against the imperfect past.

"Freedom" and "fulfillment" are often coupled together in the idea that one must be free in order to fulfill oneself. Behind the divorce epidemic – as behind the epidemics of venereal disease and accidental parenthood among the young – is the unappeasable demon of "sexual fulfillment." Behind the epidemic of poetic illiteracy is the conviction that one must free oneself from poetic tradition (by not learning it) in order to fulfill one's ambition. The question here is whether we want "fulfill" to mean more than "satisfy" – which it must if we take seriously even its literal sense: to fill full. Sexual desire is an appetite, and so, in a different way, is ambition; they can be fulfilled only temporarily and soon have to be refulfilled. Though we would like it to be, "sexual fulfillment" is really no more exalted an idea than "hunger fulfillment." Ambition fulfillment, as we still understand when talking of politics or war, is a dangerous enterprise – for a mental appetite may be larger and more rapacious than a physical one,

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may require to be refulfilled more frequently, and is less likely to be twice appeased by the same refulfillment.

If we mean "fulfill" in its larger sense – to discharge or put to rest, as when one fulfills an obligation or a promise – then we see that what we fulfill are not appetites but forms. Marriage is a form of sexual love which allows its fulfillment in both senses: in satisfaction and in responsibilty for its consequences, and it sets a term to this responsibility – "until death" – at which it may be said to be fulfilled. The form of a particular poem similarly allows a valid fulfillment of poetic ambition. And the particularity of these fulfillments, working as they do to define complex obligations to discipline, to community, to tradition, to forebears and successors, mitigates the dangers of self-renewing appetites. The seriousness of this formality can hardly be overstated, for in the fulfillment of form is death – as the marriage vows instruct us. Fulfillment "bears it out even to the edge of doom." Past fulfillment, desire is at an end; there is no need to return. Great cost is obviously involved. But to stop short of such fulfillment is to make love "Time's fool," and to fix a value upon a worth unknown.

Outrage and rebellion against the past are undoubtedly human necessities, but they are limited necessities, and they probably should be limited to youth. Things are obviously wrong with the past; young people have the clarity to see them and the energy to rebel against them. But as a general principle, such rebellion is destructive, for it keeps us from seeing that the past, unsatisfactory as it is, is the source of nearly all our good. Maturity sees that the past is not to be rejected, destroyed, or replaced; but rather that it is to be judged and corrected, that the work of judgment and correction is endless, and that it necessarily involves one's *own* past.

The industrial economy has made a general principle of the youthful antipathy to the past, and the modern world abounds with heralds of "a better future," and with debunkers happy to point out that Yeats was "silly like us" or that Thomas Jefferson may have had a Negro slave as a mistress – and so we are disencumbered of the burden of great lives, set free to be as cynical or desperate as we please. Cultural forms, it is held, should change apace to keep up with technology. Sexual discipline should be replaced by the chemicals, devices, and procedures of "birth control," and poetry must hasten to accept the influence of typewriter or computer.

It can be better argued that cultural forms ought to change by analogy with biological forms. I assume that they *do* change in that way, and by the same necessity to respond to changes of circumstance. It is necessary, nevertheless, to recognize a difference in kinds of cultural change: there is change by

Marriage, the word, and the birth of nations

It is not the boastful John Falstaff, but St. John lying on the ground like one dead, to whom we must compare a nation in the birth-throes of conversion to its eternal role. In every-day life the most similar event was perhaps the act of the bride who passed from her parents' house into that of her suitor by the one word "Yes." If she meant it, the full content of her life, her choice and her destination, was implied in this moment. That is why the word spoken at such an hour has little to do with the gabbling which is also called language, but which is only the rubbish and off-scourings of creative speech. The bride's single word of reply has a power as divine as the "Let there be light" of the world's first day. Like the cry in an hour of revolution, her "yes" carries a weight as heavy as the most heroic action. It is a revelation of the woman's whole future, a decision over her whole past. It is irrevocable, and it is true.

Such words and such moments are rare in the life of the individual, and in the life of mankind as well. Daily life prefers half measures and half lights. The pressure and danger must become tremendous, it must be a question of life and death, before our cold reason, our conventional language, and our fear of committing ourselves, will give way to the unmistakable and unique sounds of truth.

—Eugen Rosenstock-Huessy
***Out of Revolution* (*NWEC* p. 34)**

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necessity, or adaptation; and there is contrived change, or novelty. The first is the work of species or communities or lineages of descent, occuring usually by slow increments over a long time. The second is the work of individual minds, and it happens, or is intended to happen, by fiat. Individual attempts to change cultural form – as to make a new kind of marriage or family or community – are nearly always shallow or foolish, and are frequently totalitarian. The assumption that it can easily be otherwise comes from the faith in genius.

To adopt a communal form with the idea of changing or discarding it according to individual judgment is hopeless, the despair and death of meaning. To keep the form is an act of faith in possibility, not of the form, but of the life that is given to it; the form is a question addressed to life and time, which only life and time can answer. But a necessary corollary of the faith is that the individual must not answer for the community.

Individual genius, then, goes astray when it proposes to do the work of community. We rightly follow its promptings, on the other hand, when it can point out correctly that *we* have gone astray – when forms have become rigid or empty, when we have forgotten their use or their meaning. We then follow our genius or our geniuses back to reverence, to truth, or to nature. This alternation is one of the long rhythms of our history.

But the faith in genius and the rebellions of genius, at the times when these are necessary, should lead to the renewal of forms, not to their destruction. No individual can justifiably destroy anything of communal value on behalf of the community. Though individual geniuses have often enough assumed otherwise, there appears to be no reason to grant them special privileges or exemptions. No artistic or scientific genius is justified in abusing nature or culture.

The analogy I have been working with here is most readily apparent if we think of marriage and poetic forms as *set forms* – that is, forms that in a sense *precede* the content, that are in a sense *prescriptive*. These set forms are indispensable, I believe, because they accommodate and serve that part of our life which is cyclic, drawing minds and lives back repeatedly through the same patterns, as each year moves through the same four seasons in the same order.

My remaining problem is to see how so-called "free verse" may fit into my scheme. It *has* to be fitted in if I am to respect my scheme, and if I acknowledge, as I certainly do, that much free verse is poetry. There is some danger of becoming cute or precious in carrying this analogy out to such length, and yet I am working on the assumption that the analogy is valid.

One analogue of free verse, I think, must be courtship, a way of accommodating our minds to something new, of finding out what it is that we are doing or about to do. The encounter between the English language and the subjects and objects of a new continent strange to it and to its poetic tradition seems to have required this of a succession of American poets from Whitman's time until now. Who can help feeling in the early **Leaves of Grass** a kind of falling in love? The lines must reach out impulsively, become capacious and tensile, to include in their full stance and particularity the images of American experience:

> The negro that drives the long dray of the stone-yard, steady and tall he stands pois'd on one leg on the string-piece . . .

Walt Whitman in the 1840s. "One analogue of free verse might be courtship . . ." writes Wendell Berry. "Who can help feeling in the early Leaves of Grass **a kind of falling in love?"**

LONG ISLAND HISTORICAL SOCIETY/BERTHA FUNNELL, *WALT WHITMAN ON LONG ISLAND*

Forms join, and this is why forms tend to be analogues of each other and to resonate with each other.

Never mind that these loving inventories have occurred in poetry before. This is new, this confrontation with a continent needing to be realized, and we grant Whitman his liberty and his exultation; we feel ourselves free and exultant with him; we willingly forgive the absurdities that occasionally jeopardize his exuberance – his ostentatious French phrases, for instance, or his industrial optimism.

But if Whitman's work is the prime example of the freeing of verse, it is an example of something else too, for at its best Whitman's line, as we will see if we try to shorten or lengthen it, is a form. He set his line free only to make it into a *kind* of line that we recognize anywhere we see it – a new power, a new music, added to poetry, which can be learned and used. Theoretically, I suppose, any line can be written a different way, but I don't think that we are tempted to imagine this line as anything but what it is:

> Seasons pursuing each other the plougher ploughs, the
> mower mows, and the winter-grain falls in the ground . . .

And such newness does not destroy the old set forms, but renews them in renewing our understanding of what a line of verse is, our sense of the strengths and capabilities native to its properties of duration and coherence, beginning and end. The term *organic*, when applied to free or "open" poetic forms, should alert us to the nature of all form, traditional or new, for the organic forms of nature, like the ballad stanza or the stanza of Spenser, are principles that are repeatable and recognizable through a series of variations. This recognizability within difference suggests the proper relation of abstraction and particularity – and suggests, moreover, that the right function of abstraction is to give appropriate clarity and distinction to the particular. The form, recognizable from verse to verse, shapes and measures what is said, makes it musical.

So it is with Whitman's line. So it is, I believe, with the line of every writer of free verse worth reading. At some point the poet ceases to be an experimenter or innovator, and begins a life's work. **Leaves of Grass** answers for itself the questions that stood before **The Divine Comedy** or **The Canterbury Tales**: What can be done in this way? What *must* be done in this way? Once a way is chosen with enough seriousness, the analogy shifts from courtship to marriage.

The work of poetic form is coherence, joining things that need to be joined, as marriage joins them – in words by which a man or a woman can stand, words confirmable in acts. Forms join, and this is why forms tend to be analogues of each other and to resonate with each other. Forms join the diverse things that they contain; they join their contents to their context; they join us to themselves; they join us to each other; they join writers and readers; they join the generations together, the young and the old, the living and the dead. Thus, for a couple, marriage is an entrance into a timeless community. So, for a poet (or a reader), is the mastery of poetic form. Joining the form, we join all that the form has joined. ▪

To Tanya

Our household for the time made right,
All right around us on the hill
For time and for this time, tonight,
Two kernels folded in one shell,

We're joined in sleep beyond desire
To one another and to time,
Whatever time will take or spare,
Forest, field, house, and hollow room

All joined to us, to darkness joined,
All barriers down, and we are borne
Darkly, by thoroughfares unsigned
Toward light we come in time to learn

In faith no better sighted yet
Than when we plighted first by hope,
By vows more solemn that we thought,
Ourselves to this combining sleep

A quarter century ago,
Lives given to each other and
To time, to lives we did not know
Already given, heart and hand.

Would I come to this time this way
Again, now that I know, confess
So much, knowing I cannot say
More now than then what will be? Yes.

–Wendell Berry
May 29, 1982 (Married May 29, 1957)

Before You Put on the Thumbscrews of Comfort

These are twelve from a cycle of 48 ballades that made us gasp at their flashing imagery when they arrived through the mail. Though they came months before Wendell Berry's "Poetry and Marriage" (p. 44), we couldn't ask for a better illustration of his thesis of satisfaction through an established poetic form. Ballades, incidentally, were a form of lyric poetry and song most popular in 15th century France. They originally had three stanzas plus a shortened final envoy, all with the same last line. Poet Steven Nightingale, pictured above, lives in Nevada's Great Basin. "This looks like a great year for the golden eagles out here," he wrote us. "A couple of weeks ago, rambling around with a friend in Central Nevada, we saw three eagles, in different places, all of them looking at home in territories where we've never seen them before. The last one we saw, a huge female, was basking in the full light of the low sun, and its color was right out of some old fable. Take the colors of coffee and caramel, cognac and cinnamon, suede and chocolate, mix all these up with a fine lacquer, let the wind polish it for a hundred thousand years, and then some afternoon let the sunlight fall in love with it, and you have the color of that eagle." Kathleen O'Neill scratched out the illustrations from a black-on-white medium called scraperboard. —*Art Kleiner*

by Steven Nightingale
illustrations by Kathleen O'Neill

Here are the bobcat tracks set down across your desk,
The crow-marks on your gold; here, young in you is what
The baby eagles in your sleeve taught and blessed,
What coyotes know about hunger, and what good luck
You had when bears came to talk over coffee; so then, cut
Loose your clear songs in the cloud-top bar; and show
Your starry carnival, and the cougar's eyes will stow
Deserts in motion, mangroves and ocean, to carry them
Changed, into your arms, your eyes: and so will you know
All of a prayer, and what the deer said to a friend.

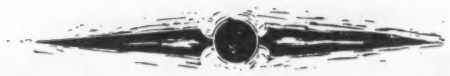
ENVOY

Go on then, the mountaintops in your open palm all glow
With the sunrise you found at midnight; and so will grow
From soil of words in your whirlwind of listening: the end
Of bitterness, thoughts of a dolphin, stature of snow,
All of a prayer, and what the deer said to a friend.

Prospecting for a tempest, in the country bar
And under the buckskin sunsets; by the coyote dens
Of somersaulting pups, across the street from a star
Visiting some girl, near the mischievous old river when
The dam broke and carried you off to a lover, and then
To the country you both loved: my friend, I know you:
Threading the pinwheel of a morning sun with dreams blue
By the roving oceans of your mood, my friend, my friend,
You cleared-eyed survivor, you lumen of what you will do,
You are the prospector panning for a glory in the wind.

ENVOY

I remember you talking to scarecrows and talking true.
Sitting on top of a storm-wave and playing the kazoo.
Climbing the skyscraper to where the brave angel was pinned,
Then to don your old hat, and go to see your old road through:
You are the prospector panning for a glory in the wind.



Do not look back: comes the season of dream,
You will be counted among the mountains, the mornings,
You will be numbered among the thunderbolts, and gleam
With the mischief, the laughter: you will be soaring
And the sidekick of coyotes; you will be roaring
Now that your life is a tinderbox of rivers, now that
The yellow plains stretch out on your palms, in your hat,
On your path; now that you are in love, so this day
Canyons are full of planets, our hearts are off the rack,
When comes the season of dream to earth to stay.

ENVOY

How can I tell you? You partner of a bobcat,
You starthrower, ruby-grower, on lovemaking attack,
Your heart is a stage and nature is the play,
You are named among the lovers, nothing do you lack
When comes the season of dreams to earth to stay.

Before you put on the thumbscrews of comfort, twilight
Was as a lacquer to your hands, laying on a new skin
In coolness of healing: so you touched together night
From morning's hawk-high legends, noon's come-hither grin,
The practical tornadoes of afternoon; from the din
And impossible promise of our lives. So then, come back,
Answer us once more with words on every's star's track,
Answer us with champagne and acid rivers, with jokes,
And a coral reef set in city streets; come off the rack
To the hundred angels at heart: our cried-forth workaday hopes.

ENVOY

Before you put on the thumbscrews of comfort, the gunnysack
Of a bloody and eyeless prosperity, we saw you tack
At noon under your hundred sails and heaven-high ropes
And the sun in your throat, we saw you, come back, come back
To the hundred angels at heart: our cried-forth workaday hopes.

Nuclear weapons in bed with you, you know who
Sets the blowtorch on our baby planet's face,
Who sets on a carving-block dawn's guiltless blue
And proceeds onward into the carcass, during our race
To build better ovens for each other, to better taste
The way the minutes wince at all of us, our education,
Our ease, our starvation, our melting in nuclear fun,
Our ludicrous hurt, cartoon loves, subscriptions; our fix
Of a nuclear prick, into the veins with a golden potion
Of atomic glitters, money, guts, we are ravished and sick.

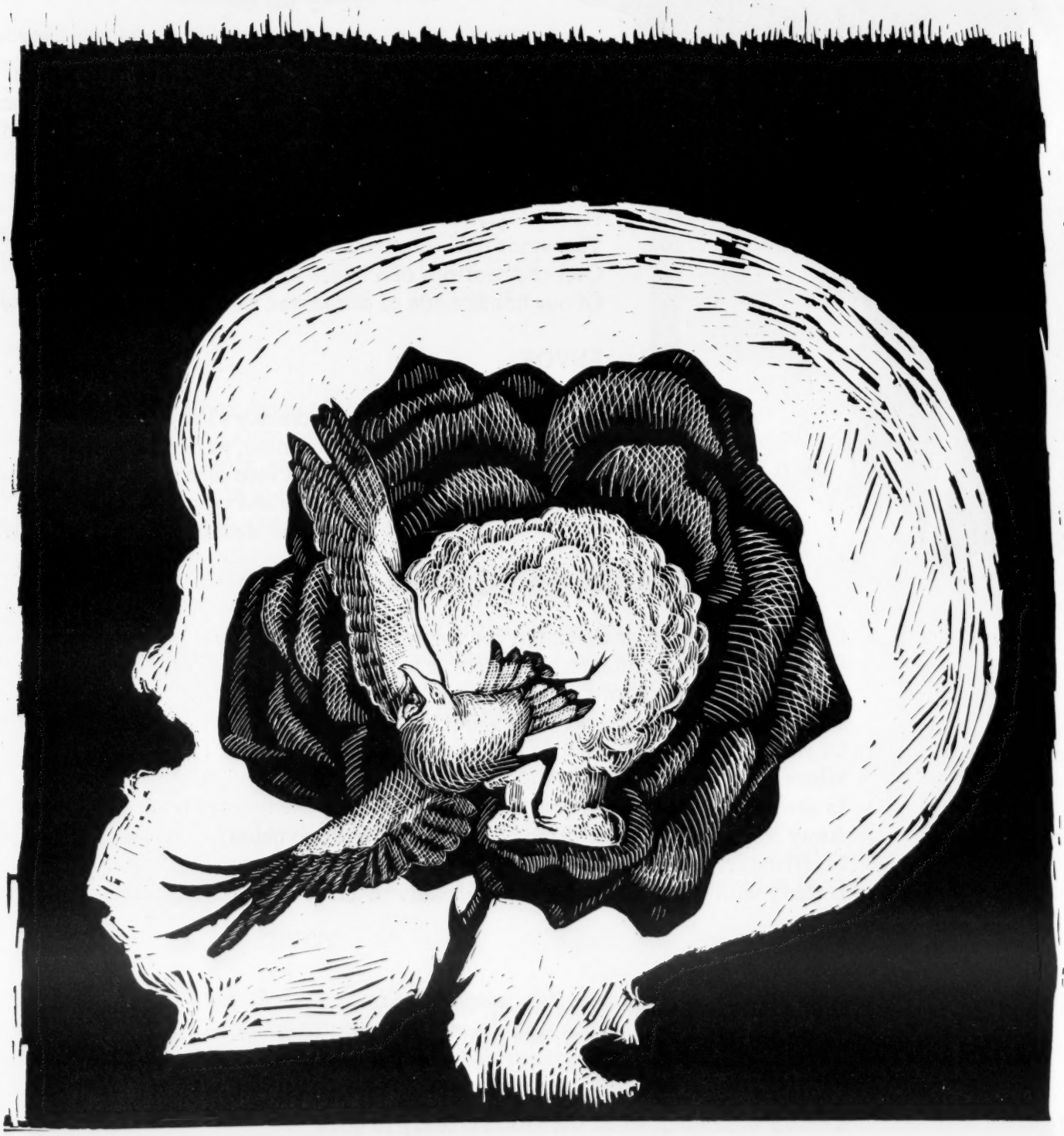
ENVOY

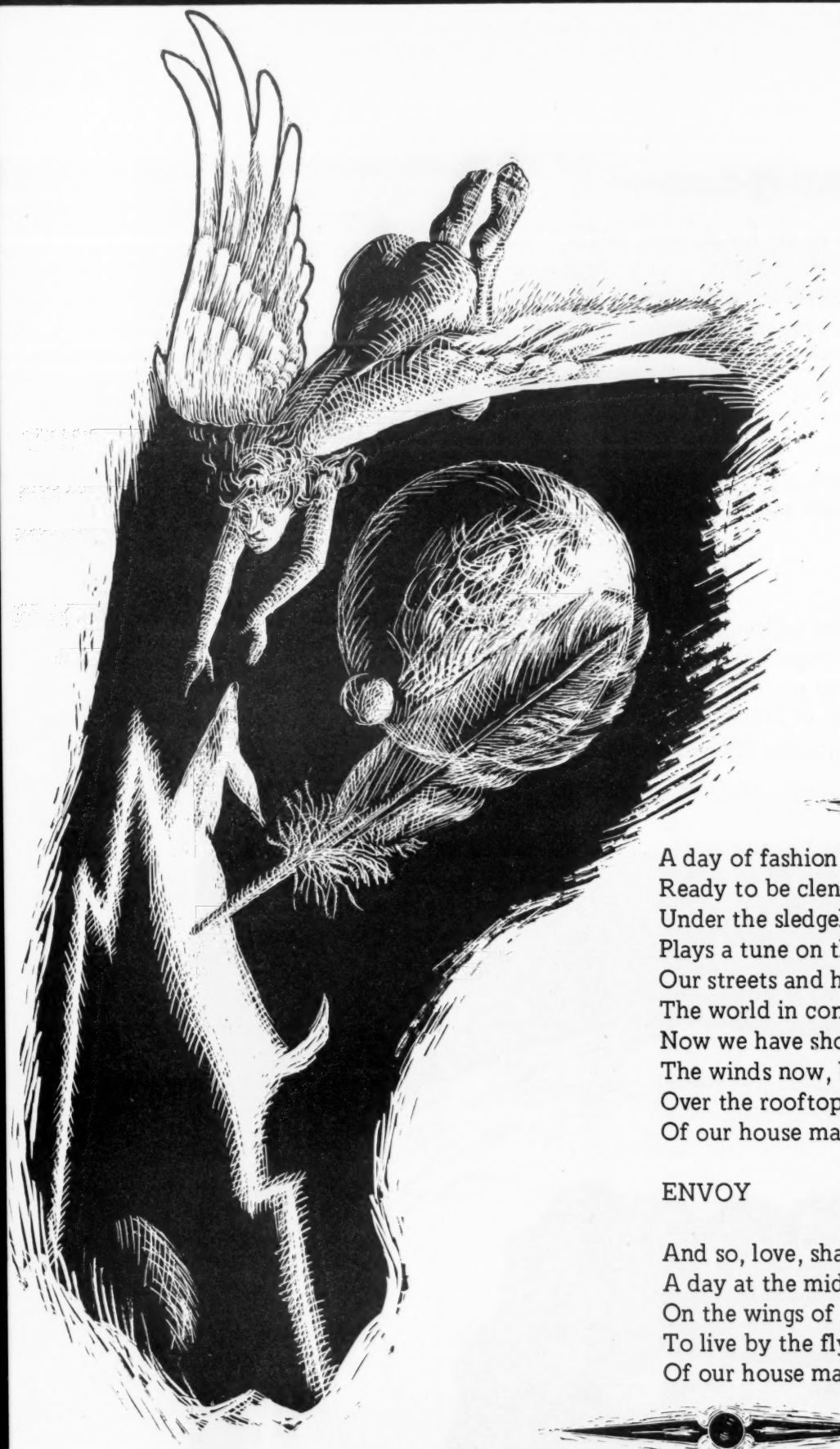
Don't live well, go on fainting with hatred, do not shun
The rifle-butts of hunger, the old throat stuffed with guns –
Go ahead, in the nuclear sweepstakes, take your bloody pick.
Win a working man, lawyer, physicist, lickspittle nation
Of atomic glitters, money, guts, we are ravished and sick.

A hydrogen bomb in my handshake, and my smile,
An old covey of tumbleweeds; now a cheap rose
Like a radio in a graveyard plays my swede style
Of paradise, around my dining table the dogs bay,
Outside the trashbins are happy, there on a tray
The time brings a choice of poisons, and our answers
Wear brass knuckles and eyeshadow; in affable cancer
We see the mushroom cloud is hungry: and yet, a spring
Of coyotes, bluejays, pipe music and bluegrass dancers,
A springtime of lilacs and fireworks is on the wing.

ENVOY

Sunlight on crutches no longer, and the necromancers
Of advertising no longer happy with us, the fanciers
Of the branding-iron no longer: the deserts will sing
Of brave old angels, of fables: oh the rimrock is sure
A springtime of lilacs and fireworks is on the wing.





A day of fashion, candied friendships, any famished plan
Ready to be clenched in a fist and brought to satisfaction
Under the sledgehammer of its own madness, while the band
Plays a tune on the blunt saw of common hunger: this is done:
Our streets and hands are new and our eyes are young;
The world in contempt of old tambourines, that no more;
Now we have shopped for a tempest in the general store.
The winds now, brothers of gunpowder clarity, all blow
Over the rooftops of a house found on water, on shore,
Of our house made of oak-leaves, deer-dreams and rainbow.

ENVOY

And so, love, shall we live, from sky's ladle to pour
A day at the midpoint of glistening, so noon does soar
On the wings of dawn and dusk into night, and so we know
To live by the flying laws, to go and open the door
Of our house made of oak-leaves, deer-dreams and rainbow.

Give us no cast-iron answers, but the comments
Of an antelope to a thunderbolt, there as we all
Watch the operations of nature when nature is sent
To be the angel of our daily affairs, our windfall
Of visions packed into practice; sent to the stall
Where we tie one another to fight, to work, to trade
In the marketplace of darkness, to forget, to fade
Away from angels, out of reach of mountains, with no guide,
No friends river-wide; now nature in quicksilver and jade
Is ready with wings when our vision is ready to glide.

ENVOY

So together to answer all the winds, we are not afraid
To hold hands with a planet; the light does not get paid
And rainbows take no wages, and the wolf is still alive.
Oh, to be done then with crying, when what we have made
Is ready with wings when our vision is ready to glide.

Idylls of the addict, death's candid fascination, a junkie
Eating lunch in a nuclear warhead, the television executing
Its viewers in the screen's bright noose: and no puppy
Playing with daisies, or with the blue crows looting
Moonlight for the necessary treasures; no soldiers shooting
Comets down out of the sky into our eyes, and no grandfathers
Spinning the top of some family. Yet these cheap slaughters
Will not reach us here, our friends are here, stories, hope,
Our loves: our home is here, and everywhere sons and daughters,
Neighbors and angels; and we will sail off on a dawn-built boat.

ENVOY

I tell you, we will triumph; with mothers and fathers,
Crows, daisies, soldiers; good wine and black panthers,
The mountain lion on our side, and the magpie; our lives elope
With the world, onions and sunlight, puppies and banter,
Neighbors and angels; and we will sail off on a dawn-built boat.

He loved steamboats. They were luxurious and clumsy,
Amazing and ungainly, miraculous and laughable, like
His youth. And now, he had arrived; now then to be
Transported towards the high-seas of warmth: any night
With her, on the way with her to be bold; to be right,
To take the long-shot on astonishment, as together they
Moved on, talking to continents and molding from clay
Of hearts the bricks of the sun, and from a shy blood
Brewing a polish of impossible moons, until touch could play
The planets in their hands, the folksong in the rosebud.

ENVOY

She loved rivers, with their cargo of starlight, quays,
Funny boats, lovemaking sagas, and that man. To their days
She brought ocean-crossings, gambling songs, the flood
Of her cashmere fury, until they found where lay
The planets in their hands, the folksong in the rosebud.

Deer are not afraid of the future; not afraid of dawn
Come up again in longing for a life we could make, not
Afraid of the white roses growing in bank vaults, of song
When the melody is played on a cinnamon stick. Taught
By the common gods – roots, tides, eyesight, rock –
No deer would ask profit of an hour, saved by a grace
Of gesture, by twilit attention, there turning his face
Towards a soaring conjured forest, and coltish ocean;
Towards the laughing canyons: Now by his step he will trace
The pathways where we walk to finish what love has begun.

ENVOY

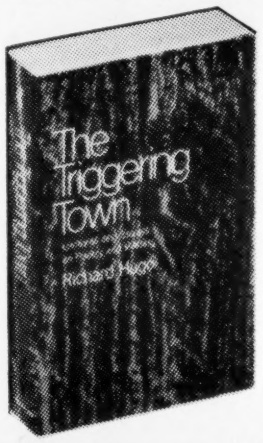
So let us make our peace; and do honor, and not debase
The animate gestures of the land: let us not chase,
But kneel in greeting before the deer that run
Towards us, to meet us when he goes with us to pace
The pathways where we walk to finish what love has begun. ■

The Triggering Town

Nine lecture/essays about what poetry is and how it is made. They make me not only want to write poems but feel like I can (for the first time since a free-verse writing class shut me off ten years ago). I hate how-to writing books, but I would cheerfully recommend this one to all creative people who feel blocked or not quite gathered into their work. It's part antibodies for the English-major virus, part (interesting) poet's reminiscences, and mostly precepts about writing that are practical, insightful little poems themselves. —*Art Kleiner*

[Suggested by Tom Hansen]

The Triggering Town
(Lectures and Essays on Poetry and Writing)
Richard Hugo
1979; 110 pp.
$3.95 postpaid from:
W.W. Norton and Co.
500 Fifth Avenue
New York, N.Y. 10110
or Whole Earth Bookstore



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Every moment, I am, without wanting or trying to, telling you to write like me. But I hope you learn to write like you. In a sense, I hope I don't teach you how to write but how to teach yourself how to write. At all times keep your crap detector on. If I say something that helps, good. If what I say is of no help, let it go. Don't start arguments. They are futile and take us away from our purpose. As Yeats noted, your important arguments are with yourself.

•

There are a few people who become more interesting the longer they stay on a single subject. But most people are like me, I find. The longer they talk about one subject, the duller they get. Make the subject of the next sentence different from the subject of the sentence you just put down. Depend on rhythm, tonality, and the music of language to hold things together. It is impossible to write meaningless sequences. In a sense the next thing always belongs. In the world of imagination, all things belong. If you take that on faith, you may be foolish, but foolish like a trout.

•

Use "love" only as a transitive verb for at least fifteen years.

•

We creative writers are privileged because we can write declarative sentences, and we can write declarative sentences because we are less interested in being irrefutably right than we are in the dignity of language itself. I find words beautiful that ring with psychic truth and sound meant.

•

When Faulkner, replying to the question, "Why do you drink so much?" answered, "For the pain," he may not have meant to cure the pain. He may have meant to keep it alive.

•

Writing is a way of saying you and the world have a chance. All art is failure.

The Voice That Is Great Within Us

Should you ever decide to review an anthology of modern poetry, my vote is for **The Voice That Is Great Within Us.** *Editor Hayden Carruth is a poet himself, and obviously loves his art form. The book is all the more valuable because his selections are, admittedly, subjective. It is so complete and tantalizing at the same time that one can skim through and still have an experience that is not shallow, mostly because it is impossible to avoid being drawn to reading more and more. Some who read this collection might even be moved to (gasp!) buy a volume of someone's poetry.*

Very few people read poetry these days. Very few of my friends, anyway. Yet, whenever I describe a poem I like to someone, what it is "about," how it makes me feel, what I like about it, that person is always interested, even fascinated. Why is that? —*Barbara Spenader*

The Voice That Is Great Within Us
(American Poetry of the Twentieth Century)
Hayden Carruth, Editor
1970; 722 pp.
$5.20 postpaid from:
Bantam Books
414 East Golf Road
Des Plaines, IL 60016
or Whole Earth Bookstore

•

The animal I wanted
Couldn't get into the world . . .
I can hear it crying
When I sit like this away from life.

—Kenneth Patchen

•

i like my body when it is with your
body. It is so quite new a thing.
Muscles better and nerves more.
i like your body. i like what it does,
i like its hows. i like to feel the spine
of your body and its bones, and the trembling
-firm-smooth ness and which i will
again and again and again
kiss, i like kissing this and that of you,
i like, slowly stroking the, shocking fuzz
of your electric fur, and what-is-it comes
over parting flesh. . . . And eyes big love-crumbs

and possibly i like the thrill

of under me you so quite new

—e.e. cummings

•

Now let no charitable hope
Confuse my mind with images
Of eagle and of antelope:
I am in nature none of these.

I was, being human, born alone;
I am, being woman, hard beset;
I live by squeezing from a stone
The little nourishment I get.

In masks outrageous and austere
The years go by in single file;
But none has merited my fear,
And none has quite escaped my smile.

—Elinor Wylie

Synapsida

The animal protoplasm of amphibians reshapes itself into vegetarian reptiles who diversify into insect-eating, reptilelike mammals. Mammal-like reptiles emerge, become the first true "top" carnivores of a landed foodchain. And then dinosaurs mysteriously upstage them. Our immediate ancestors take to hiding and speed and elusiveness — only to return as recent stars of the evolutionary play. Here's the plot, beautifully illustrated, technically described, mind-bogglingly filled with a "parallel Earth that seems in retrospect almost a satirical reflection of our own." —*Peter Warshall*

Synapsida
(A New Look into the Origins of Mammals)
John C. McLoughlin
1980; 154 pp.
$15.70 postpaid from:
Viking Press
299 Murray Hill Parkway
East Rutherford,
NJ 07073
or Whole Earth
Household Store

The Mesozoic era was a time of absolute rule by the dinosaurs. The unique mammalian consciousness enabling us to read this book originated during the Mesozoic in response to the dinosaurian dominion.

•

You are blindfolded such that you can discern light and dark, but no more. You live in a vast junkyard piled three and four meters deep with old automobiles, interspersed here and there with vast pits and the ruins of tall buildings. Not only is this Hell inhabited by packs of man-eating wild dogs, but in the air helicopters circle, filled with armed men who hope to shoot you. Your appetite is tremendous; to survive, you must eat your own weight in food *each day*. The only food is live rabbits, which you must catch with your own hands. Not only must you escape predators and snare food in this nightmarish landscape; you must also find a mate, raise a family, and leave descendants. Our Mesozoic ancestors were heroes, every one.

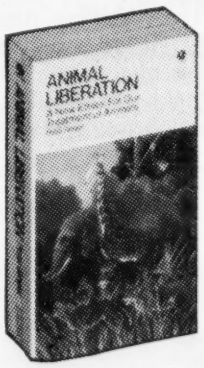
Animal Liberation

Animal Liberation *brings to light information unknown (or avoided) by most people. Currently over 70 million animals die each year in U.S. laboratories. Most of the chemical products we use, from cosmetics to oven cleaners, are first tested on living animals. Death for these animals comes after days, weeks, or even months of pain. Contrary to what the general public believes, the bulk of these tests and experiments consist of duplicative and unnecessary research. In most cases, non-animal testing methods could be used instead.*

The book also thoroughly explores "factory farms," where hundreds of millions of calves, chickens, and other animals spend their lives in small cages or stalls just larger than their bodies.

Animal Liberation *is not just a documentation of society's ills but a skillfully presented case for animal equality.*
—*Reb Anderson*

Animal Liberation
Peter Singer
1977; 308 pp.
$3.75 postpaid from:
Avon Books
Mail Order Department
959 Eighth Avenue
New York, NY 10019
or Whole Earth
Bookstore



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Harlow and Suomi describe how they had the "fascinating idea" of inducing depression by "allowing baby monkeys to attach to cloth surrogate mothers who could become monsters": "The first of these monsters was a cloth monkey mother who, upon schedule or demand, would eject high-pressure compressed air. It would blow the animal's skin practically off its body. What did the baby monkey do? It simply clung tighter and tighter to the mother, because a frightened infant clings to its mother at all costs. We did not achieve any psychopathology. . . .

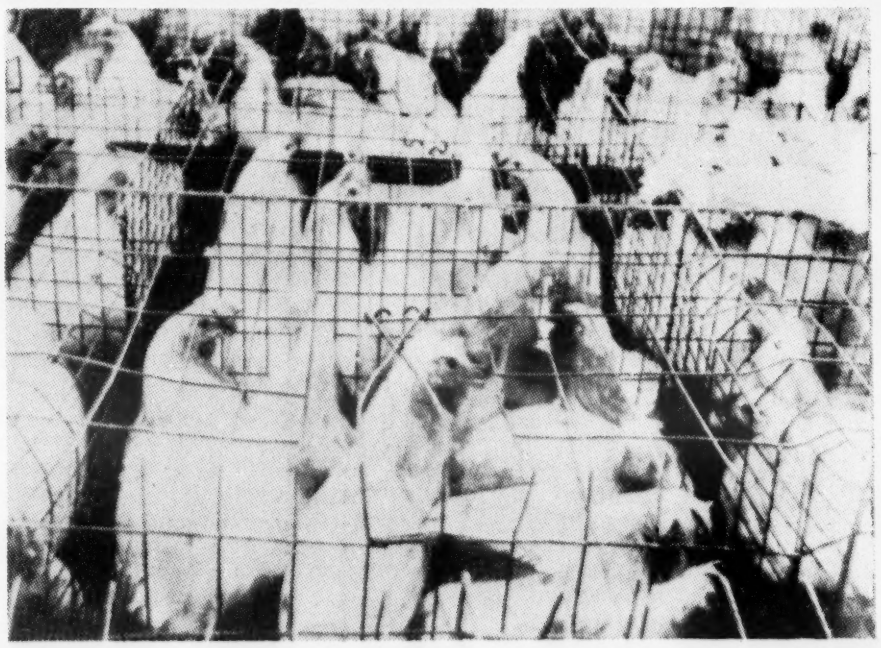
"Finally, we built our porcupine mother. On command, this mother would eject sharp brass spikes over all of the ventral surface of its body. Although the infants were distressed by these pointed rebuffs, they simply waited until the spikes receded and then returned and clung to the mother."

•

In case anyone still thinks it may be possible to find some relevant characteristic that distinguishes all humans from all members of other species, let us consider again the fact that there are some humans who quite clearly are below the level of awareness, self-consciousness, intelligence, and sentience of many nonhumans. I am thinking of humans with severe and irreparable brain damage, and also of infant humans; to avoid the complication of the potential of infants, however, I shall concentrate on permanently retarded humans.

Philosophers who set out to find a characteristic that will distinguish humans from other animals rarely take the course of abandoning these groups of humans by lumping them in with other animals. It is easy to see why they do not; to take this line without rethinking our attitudes to other animals would mean we have the right to perform painful experiments on retarded humans for trivial reasons; similarly it would follow that we had the right to rear and kill them for food.

As many as 9 hens are squeezed into the 18 by 24 inch cages shown here. The crowding declines only as the weaker birds die. One dead bird has been taken out of the cage and placed on top for later removal. To save labor, no attempt is made to care for sick birds.



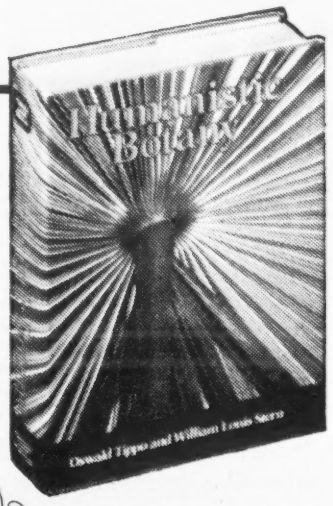
Humanistic Botany

This absorbing book may turn out to be the only botany textbook I will ever actually read from cover to cover. Tippo and Stern, men of wide intellectual experience beyond science, have broken the stereotype of scientists as non-writers. Writing with grace and humor, they have produced a textbook actually intended to be read.

It has the obligatory botany textbook chapters on plant structure and functioning, the cell, genetics, and evolution, and chapters surveying the plant kingdom from algae to angiosperms with emphasis on their reproductive mechanisms – all this basic info in inviting, comprehensible form. But it also has chapters on poisonous plants, medicinal plants, hallucinogens, food plants, spices, and exploring for plants, and has biographies of Linnaeus, Mendel, and Darwin.

This text, written for use in botany classes for non-science majors, does have less-detailed and less-technical scientific information than standard botany texts like Raven's **Biology of Plants** *(NWEC, p. 55). Read Tippo and Stern for enjoyment and understanding, and use Raven to look things up.* *–Peggy Robinson*

Humanistic Botany
Oswald Tippo and
William Louis Stern
1977; 608 pp.
$19.95 postpaid from:
W.W. Norton and Co.
500 Fifth Avenue
New York, NY 10110



Fertilization of rockweed (Fucus); large egg surrounded by a flock of small sperms. For decades Fucus has been used in college classes to demonstrate fertilization. Drops of sea water with male gametes and eggs are placed together under the microscope and soon clouds of sperms are seen hovering around the eggs. There is so much lashing of flagella that the egg is thrown into a fast spin.

•

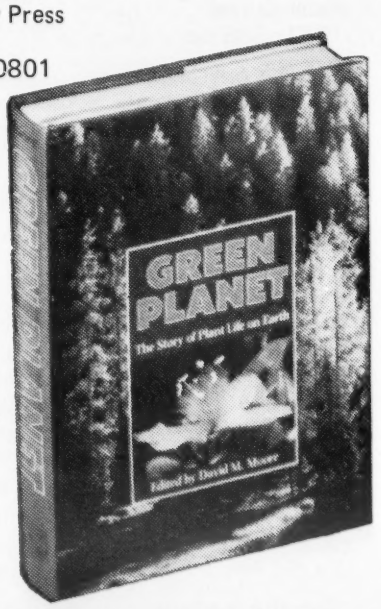
In the Middle Ages poisoning became a flourishing art in which the Borgia and Medici families earned special notoriety. Plant poisons were commonly used to remove the competition and to promote succession to royal thrones and to other positions of power. These poisons thus came to be referred to as "succession powders."

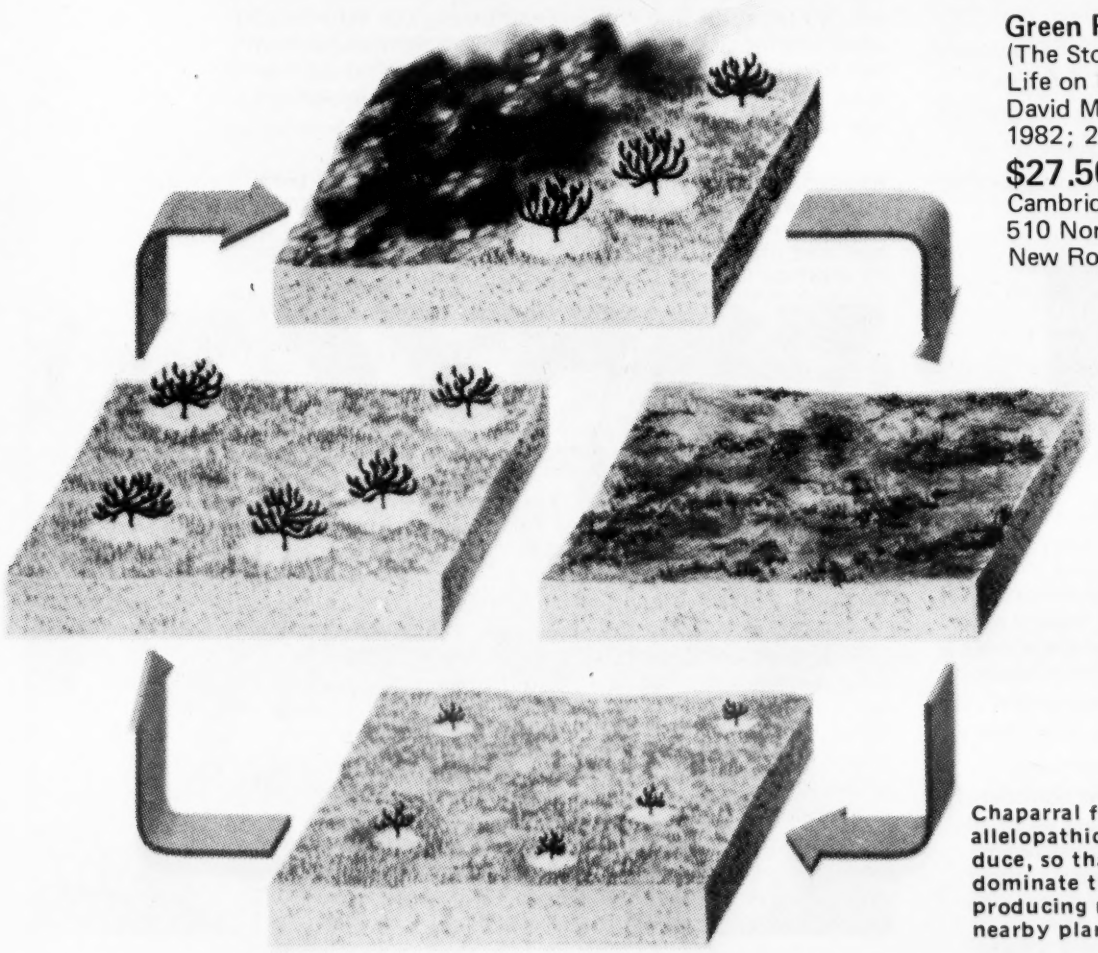
Green Planet

If the question posed is not "what is this plant" but "why is this plant growing here," you have moved from strict botany to plant geography and plant ecology. This introduction to these subjects is not a textbook, though it easily could be used as one. Short entries from 30 writers are woven with great color photographs into seven broad chapters (on the history of plant exploration, methods of plant study, plant evolution, environmental factors, types of vegetation today, types of plant domains, and the relationships between plants and people). It's a tour of bioregions from all over the world that adds awareness of our total dependence on the Earth's green skin.

–Richard Nilsen

Green Planet
(The Story of Plant
Life on Earth)
David M. Moore, Editor
1982; 288 pp.
$27.50 postpaid from:
Cambridge University Press
510 North Avenue
New Rochelle, NY 10801





Chaparral fires destroy not only the shrubs but also the allelopathic substances (volatile terpenes) that they produce, so that immediately afterwards herbs and grasses dominate the vegetation. Eventually, new shrubs grow, producing more toxic terpenes which inhibit growth of nearby plants.

Kristall Growing

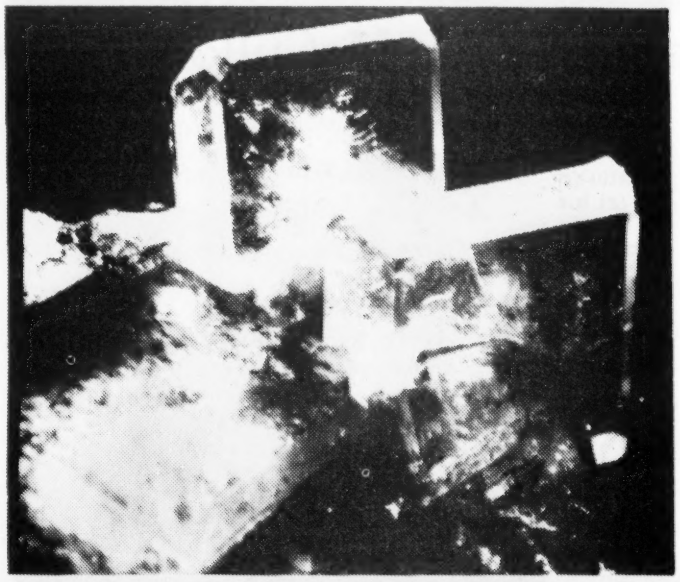
If you live in Tucson, you live in the center of crystal adoration. Each year at the Tucson Gem and Mineral Show, every motel near the freeway has almost every room filled with salesmen showing off tourmalines, agates, wulfenite, chrysocolla, you name it. It is a week of celebration for me and my friends. We wander the halls, stare at the wonders of the inorganic world, dream rhodochrosite dreams.

In one of the rooms, these crystal-growing kits were on sale. My nephew grew them — teaching me again how crystals "enlarge" their original geometric forms but do not alter their shape like plant and animal embryos do. It's as intriguing as bird watching. Crystals grow on rocks so you end up with a stack of eye-catching colors and light-bending facets. —*Peter Warshall*

Kristall Selber Zuchten
(Small kit, grows 4 types of crystals, 1" to 4" diameters, from solution)
$22 postpaid

Kristall Labor
(Large kit, grows 12 types of crystals, to 25" diameter, from solution and melting)
$54 postpaid

both from:
Kristall Growing
Box 3021
Tucson, AZ 85702



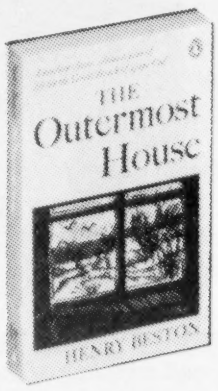
The Outermost House

I would recommend Henry Beston's **The Outermost House** *as reading for someone who had never seen the sea, or having seen, had not understood. Beston's 1928 hut on the easternmost edge of Cape Cod has since washed away; what remains is a year's perceptions from a man some of us will recognize as a kindred soul. Continuity: to know that the struggle to preserve the Earth and the awareness of her beauty is no new fad — Beston pondering, 54 years ago, the effects of oil spills on a then-almost-vacant Cape Cod. Beston brings us to recall what we are fighting to preserve: "There are three great elemental sounds in nature: the sound of wind in a primeval wood, the sound of rain, and the sound of outer ocean on a beach."* —*John Benecki*

•

There is a new sound on the beach, and a greater sound. Slowly, and day by day, the surf grows heavier, and down the long miles of the beach, at the lonely stations, men hear the coming winter in the roar. Mornings and evenings grow cold, the northwest wind grows cold; the last crescent of the month's moon, discovered by chance in a pale morning sky, stands north of the sun. Autumn ripens faster on the beach than on the marshes and the dunes. Westward and landward there is colour; seaward, bright space and austerity. Lifted to the sky, the dying grasses on the dune tops' rim tremble and lean seaward in the wind, wraiths of sand course flat along the beach, the hiss of sand mingles its thin stridency with the new thunder of the sea.

The Outermost House
Henry Beston
1928, 1976; 225 pp.
$3.25 postpaid from:
Ballantine Books
400 Hahn Road
Westminster, MD 21157



Restoration and Management Notes

This magazine is the praxis of Mahayana Buddhism — the get-down-and-do-it of authentic land love. Its locus: the prairies, wetlands, streams, lakes, and deciduous and conifer forests of central and northeastern North America. Nearctic realm. Temperate broadleaf forest. Its goal: heal damaged watersheds; restore the native beauty of scarred earth; coordinate everybody and anybody into a massive exchange of information that is locally useful. So far it's a great success. It should be copied in every other bioregion of the planet. —*Peter Warshall*

Restoration and Management Notes
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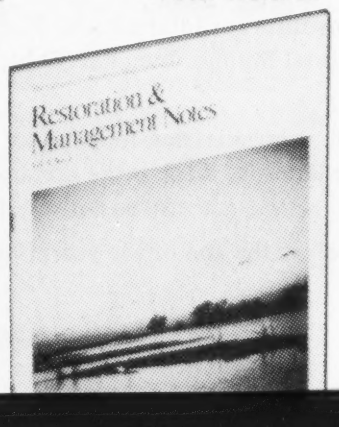

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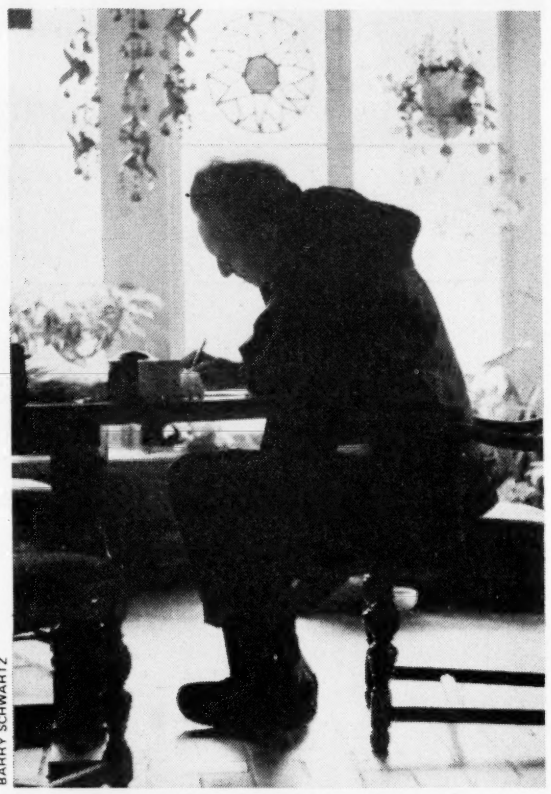
Less Real

A good example of an "ecosystem" ignored by ecologists is the system of right-of-way utility corridors and land occupied by railroads and highways. The number of acres taken up in this way is staggering. This "ecosystem" spreads all over the country and is bigger than many states if considered altogether. Consideration of these areas offers a chance for ecosystem management on a very big scale, and probably with industrial support. Management of right-of-way is a big project, a professional specialty in itself. The people responsible for management have a conference every year. However, pure ecologists have tended to stay away from such meetings. These ecologists may view such areas as less "real" than undisturbed ones, feeling that research on such areas might be tainted with practicality, or they simply may believe it is less pleasant to work under a power line than in a virgin prairie or undisturbed wetland. Whatever the reason, ignoring these disturbed ecosystems is a mistake.

THEY THREW GOD OUT OF THE GARDEN

Letters from Gregory Bateson to Philip Wylie and Warren McCulloch *Edited by Rodney E. Donaldson*



Gregory Bateson at his Ben Lomond home, 1977.

BARRY SCHWARTZ

Oceanic Institute
Memorial Day
June, 1967

Dear Phil:

I want to get this written down while I have it vivid in my head.

I have read about half of **Magic Animal** and these are first reactions. Of course, as you know, I agree with nine-tenths of it and am delighted with much of it. You have said many things which I never knew how to say – some which I never knew.

But I want to write about points of disagreement. There are two points, and both of them derive from the same philosophic roots.

My colleagues and Darwin and Ockham always spit at me for saying these things – but I am willing Darwin should borrow O's razor to slit his own throat.

The first point is the concept of "instinct" and the

This is a small sampling of the voluminous correspondence of Gregory Bateson. This correspondence, along with all the rest of Bateson's professional papers, films, and tape recordings, is in the process of being organized and catalogued, following which a volume of the correspondence will be edited for publication.

The three letters in this selection were written in 1967, during the highly fertile period which preceded the publication of **Steps to an Ecology of Mind** *(***NWEC***, p. 28). At this time Bateson was increasingly turning his attention away from the dolphins with whom he had been working since 1963 and towards the thinking which reached a peak in the 1968 Wenner-Gren Conference on the Effects of Conscious Purpose on Human Adaptation, the conference described by Mary Catherine Bateson in* **Our Own Metaphor** *(Alfred A. Knopf, 1972). These letters offer an illuminating glimpse into the evolution of ideas which preceded that meeting.*

The first two letters – vintage Bateson – were written to Bateson's neighbor and friend, the novelist-essayist Philip Wylie, stimulated by a reading of the latter's **The Magic Animal** *(Doubleday, 1968). Attentive readers will recognize an early, and much more colorful, version of the myth offered in "Conscious Purpose Versus Nature" (***Steps***, pp. 434-436).*

In the third letter, to neurophysiologist Warren McCulloch, Bateson expands some of the thinking in the Wylie letters to arrive at a new way of analyzing religious ideas and behavior. *–Rodney E. Donaldson*

The project to organize and catalog the professional papers, films, and tape recordings of Gregory Bateson, as well as to edit for publication a volume of his correspondence, is in need of financial support. More than $30,000 over a two-year period is needed to accomplish these tasks.

Tax-deductible contributions or grants may be made to the Institute for Intercultural Studies, earmarked "For work on the Bateson papers," and mailed to The Institute for Intercultural Studies, Inc., c/o Sloane & Hinshaw, 145 East 74th Street, Suite 1C, New York, NY 10021.

The Institute for Intercultural Studies is a nonprofit, tax-exempt organization founded by Margaret Mead in 1944. Its president is Margaret and Gregory's daughter, Mary Catherine Bateson. I.I.S. is the literary executor of Gregory Bateson's estate. For further information, call (212) 737-1011.

The Institute especially requests contributions to be mailed before the end of the year, if possible.

second is the relation between "magic" and "religion."

And bad cess to B.F. Skinner who resembles his famous namesake, the schoolmaster in **Way of All Flesh**, combining the "wisdom of the dove with the harmlessness of the serpent."

Be that as it may (or, as my former Swiss colleague Ruesch put it, "May that be as it is . . . ."), the instinct thing can be said two (and more) ways:

A. Rats have an instinct for spacing themselves, and when this is thwarted by overcrowding, complex confusions occur in their life processes, so that they die of endocrine imbalance. Or B. Rats have an instinct for endocrine imbalance, which is touched off by overcrowding. Failing such stimulation, the rats are forced into all the complex business of living – the symptoms of thwarted instinct for death by crowding.

Now, if I were an engineer, I would build rats on one or the other of these two systems, according to what specifications I had to meet. But, *pace* Darwin and the whole industrial revolution and Ockham, evolution is not an engineer; and I do not believe that rats are built on *either* of these principles.

The engineer's question is: on which side of the fence do you want to place the *complexity*? Is normal life simple and pathology complex? Or *vice versa*?

Now, we know from genetics that there are some cases in which a single gene determines a definite (?single) characteristic; and my namesake Gregor Mendel (my namesake is bigger than yours, Dr. Skinner) was lucky enough or cunning enough to happen on some of these. But, as genetics progresses, it becomes clearer and clearer that the characteristics of animals are determined by complex, interacting, overlapping and "redundant" (in the technical sense) constellations of genes. And this probably is progressively more so as we approach more "fundamental" characteristics (the great homologies, symmetry, etc.).

If this be true of physical characteristics, it is probably also true of behavioral-physiological characteristics, and it then becomes nonsense to ask the engineer's question, above. The complexity is on both sides.

And I do know this, that the older an automobile gets and the further it is from the engineer who designed it, the more *complex* it gets with multiple "pathologies" and the more it takes on characteristics of a *living* thing – moods, caprice, etc. New cars are "it" but an old car is "she."

So – I personally avoid the word *instinct* because it suggests to the reader a specific tag or gene or something which determines directly a specific "piece" of behavior. There may be such tags for the dancing of dancing mice, but I doubt it for such constellations of behavior as are denoted by words like *territory*.

Norbert Wiener once described ants as "cheap mass-produced articles," and it may be true that insects with their extremely economical circuitry are constructed on the engineer's plan but even this I doubt.

Consider the lilies of the field – they are not racked by separable purposes; and yet neither Darwin nor B.F. Skinner was ever arrayed like one of these.

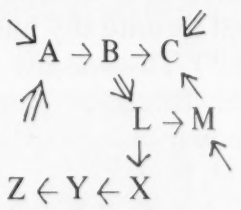
The whole trouble (or a lot of it) results from the instinctive (innate) vulgarity of scientists, which is derived from the same "instinct" as is the vulgarity of magic. (Even old Fraser knew that magic and science were somehow one.)

The innate component of this vulgarity is *relational*. It is the relation between mind and consciousness – a relation of partial separation. You and I and Darwin and Skinner are all genotypically built upon a plan whereby that small selection from mind which appears upon the "screen" of consciousness, is, for the most part, those bits and pieces which will inform our purposes.

NEW CARS ARE "IT" BUT AN OLD CAR IS "SHE."

(The conscious/unconscious barrier is surely both an engineering necessity and genotypically determined. Whether the principles governing the selection of items for the screen of consciousness are also genotypically determined, I don't know. There is surely some learning and habit formation in this business. That *attention* and the content of consciousness are linked must be laid down deep in the genome. But, no doubt, the directions of selective attention are part learned and part instinctive. There are always difficulties of this sort whenever we ask about *components* of an "instinct.")

But the bits and pieces of mind which appear before consciousness invariably give a false picture of mind as a whole. The *systemic* character of mind is never there depicted, because the sampling is governed by purpose. We see on the screen that "A → B → C" and "L → M" and "X → Y → Z" but never the truth which looks more like:



where A → B means B = f(A); and A ⇒ B means B = f(1/A)

We never see in consciousness that the mind is like an ecosystem – a self-corrective network of circuits. We only see arcs of these circuits.

And the instinctive vulgarity of scientists consists precisely in mistaking these arcs for the larger truth, i.e., thinking that because what is seen by consciousness has one character, the total mind must have the same character.

Freud's personified "ego," "id," "super-ego" are, in fact, not truly personified at all. Each of his components is constructed in the image of only consciousness (even though the component may be unconscious) and the "consciousness" does not resemble a total person. The isolated consciousness is necessarily depersonified.

The whole iceberg does not have those characteristics which could be guessed at from looking only at what is above water. I mean: the iceberg does – mind does not. Mind is not like the iceberg.

But the vulgar scientist talks and plans as if mind resembled iceberg. He plans and acts upon his plans. Invents atom bombs and feels hurt when a beneficient deity screws up international relations and sends fall-out.

As usual.

A more modern deity would have thrown a bucket of fall-out over the both of them.

But that's only a parable. Of course! The point is that, even before modern technology, something had to be done about the innate split between consciousness and the rest of the mind, because the unaided consciousness would always wreck human relations. Because the unaided consciousness must always combine the wisdom of the dove with the harmlessness of the serpent.

And I will tell you what they did in the old Stone Age to deal with that split.

Religion is what they did.

It's that simple, and Religion is whatever they could devise to beat into man the fact that most of him (and, analogously, most of his society and the ecosystem around him) was systemic in nature and imperceptible to his consciousness.

Now you are ready to think about religion and magic.

The instinctive, innate barrier between consciousness and the rest of mind is very old (though its effects have recently become disastrous through the technological implementation of consciousness). Even before man chipped flint, it must have been necessary to correct for the murderous destructiveness which necessarily goes with conscious, calculating and common-sense policies. If bacteria, or Jews, or rats offend you – import mongooses to exterminate them. Of course. This is Nazism and the bacterial theory of disease. As they say of Skinner's operant conditioning, "It works." But this theory, even in the Stone Age, would not work between people.

LOVE IS CONTRARY TO CONSCIOUS COMMON SENSE BECAUSE LOVE INVOLVES THE TOTAL *SYSTEMIC* MIND.

Love is contrary to conscious common sense because love involves the total *systemic* mind.

Cain was, appropriately enough, an inventor. He invented agriculture. God (Cain's total systemic mind or the systemic human ecosystem in which Cain lived) refused the cabbages, which Cain sacrificed. God then told Cain that Abel loved him (Cain). "His desire shall be unto thee and thou shalt rule over him." (cf. the curse on Eve in previous chapter – "Thy desire shall be unto thy husband and he shall rule over thee.") This was the last straw because love is precisely that to which the pragmatic, headstrong, purposive consciousness must always be allergic.

So Cain picked up a big stone and smashed Abel's skull.

So Cain won.

This included dreams and trances, intoxication, castration, rituals, human sacrifices, myths of all sorts, invocations of death, art, poetry, music, and so on.

And, of course, they did not and *could not* really say or know clearly what it was they were doing or why. And, often, it did not work.

Darwin says somewhere in the autobiography that as he got more famous (or old or something), he became less and less able to read poetry.

Perhaps the attempt to achieve grace by identification with the animals was the most sensible thing which was tried in the whole bloody history of religion. Australian totemism makes a lot of sense. And the cave paintings of Altamira, and Konrad Lorenz drawing live animals on the blackboard.[1]

See also God's rebuke to Job's arrogance:

"Dost thou know when the wild goats of the rock do calve? Or knowest thou when the hinds bring forth?" And so on.

I was delighted by what you said about the morality of animals!

But magic is something else again.

You describe magic as the evolutionary parent of religion, but this is surely wrong.

Magic is what the vulgar and purposive consciousness snipped out of religion. (Just as the viruses are DNA that came unstuck.) The use of quasi-Religion to bolster priesthood is, of course, an another vulgarity.

So, you see, my objections to the vulgar scientific

theories of instinct and my view of the nature of magic both spring from the same philodophic roots.

Now hurry back from Kauai so we can talk about all this before you leave Hawaii. Gregory

P.S. I keep meeting people who think that the opening words of Genesis are "*In the beginning* was the *Word* . . . etc." I hope you are not guilty of this error.

JUDITH VAN SLOOTEN

Gregory Bateson, 1967.

The correct text is as follows:

In the beginning, all was mush; and the mush was without form and void. And God brooded on the face of the mush, as it is written. "A hen is an egg's way of making another egg." And as he brooded, so the mush divided itself and became many small pieces of mush. And God looked and saw that it was good.

And behold the Name of that God was called Tinkertoy and Tinkertoy had a grab bag in which were very many handy little magical tricks.

And each small piece of mush reached into the grab bag to see what it could get. And the lucky got more tricks than the unlucky. As it is written: To him that hath shall be given, but from him that hath not shall be taken away even that which he seemeth to have.

And God called the tricks *adaptations*, and God looked and saw that it was good.

LOVE IS PRECISELY THAT TO WHICH THE PRAGMATIC, HEADSTRONG, PURPOSIVE CONSCIOUSNESS MUST ALWAYS BE ALLERGIC.

And after that they ran around, each according to his kind. And they did eat each other. And some kinds did eat other kinds, and some kinds did eat their own kind. Only the dog did not so.

And God looked and saw that it was good and God said: Behold these creatures, which I have created in the image of Charles Darwin. How cleverly they do steal each other's ideas.

And it came to pass that, between meals, they all played a game. Each against all, and all against each.

And the name of the game was "Free Enterprise." And each played as dirty as he could according to the tricks which he had received.

But God always won because he played zigzag as a snipe flies.

So they threw him out.

G.B.

BOX 428 SAUSALITO CA 94966

Memorial Day + 3

Dear Phil:

On the last chapter now – "supererogation" – No – check this word with Mrs. Malaprop –

I have told you the story of the Creation. Here is: "The Garden of Eden" – The myth in biblical form is (as is so often the case) upside-down. Adam and Eve ate the fruit of knowledge. An apple, high on the Tree. They had to place one box on top of another in order to reach it. They then ate it – the sweet reward of a successful shortsighted scheme *consciously* planned. This, as you suggest, no doubt made them drunk, with partial arrogance.

The arrogance was partial in the sense that what they were arrogant about was that miniscule part of themselves which achieved the conscious plan. (No arrogance is total.)

In this arrogance, they threw out all the rest of themselves – thus breaking up the total systemic thing they called "mind."

I.e., *They threw god out of the garden.*

After that, the ecosystem of the garden got out of kilter – because God is the inner and the outer systemic character of everything – mind and garden.

So they said: "It's a vengeful god."

After the loss of the rich topsoil, of course gardening became very hard work, and Adam sweated (especially on the *brow*).

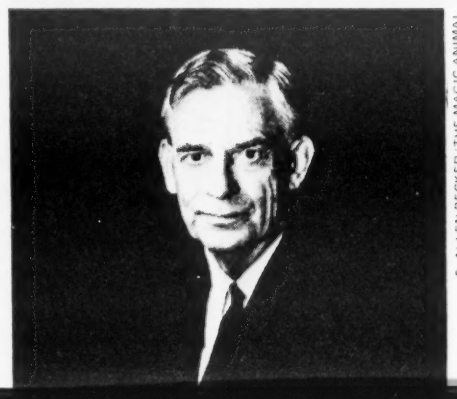
(This was before Cain had invented the combined tractor-plough-harvester, and all farmers devoted the rest of their lives to buying the damn things on the installment plan.)

Eve began to resent the processes of coition and reproduction, which always somehow reminded her of that larger life, which Adam had sacrificed in order to buy her a washing machine – which she had asked for.

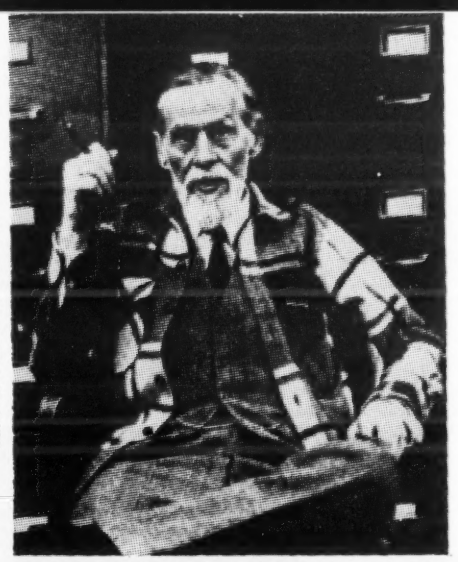
So she experienced a good deal of pain in childbirth, and felt that the capacity and need for love was God's curse on women, which was true in an upside-down way.

Adam managed to get some vengeful satisfaction

Philip Wylie, 1967



E. ALLEN BECKER / THE MAGIC ANIMAL



Warren McCulloch, 1967

out of the game of Free Enterprise – killing everything in sight.

But the customs of that benighted time did not permit Eve to do this.

So she joined a bridge club.

As to their children, I have already told you that story in the literal unchanged biblical version – the "Authorized." (The newer versions, specially retranslated for illiterate inhabitants of the suburbs, have dropped the homosexual bit.)

Finally, god sent his only begotten sons, Wylie and Bateson, to try to unravel the whole mess, and I'd hate to tell you what happened to them.

Gregory

December 20, 1967

(To Warren McCulloch)

I begin to wonder whether I am mad or have hit on an idea which is much bigger than I am. Of course these are not mutually exclusive alternatives but I would like your confidential judgment as to whether one of these alternatives is true to the exclusion of the other or in what proportions they coexist.

You have had a memorandum which I prepared as a springboard for our summer conference in Austria. And what I am now thinking is a development from that memorandum. I suggested in that memorandum that the lineal arguments of human purpose necessarily conflict with the cybernetic arguments of physiology, sociology, and ecology, and that therefore, following his purposes, man almost inevitably messes up his own physiology, social system, and ecosystem.

I had joked, though not in my memorandum, about the idea that Original Sin was the discovery of planned purpose; and that, following this discovery, Adam and Eve expelled God from the Garden. This led to the loss of topsoil, etc. The general notion was that God symbolized the systemic and cybernetic nature of the environment which inevitably took vengeance on man's shortsightedness.

It occurs to me now that this little parable can be considered to be a serious truth – especially if we turn it upside down.

I suggest that one of the things that man has done through the ages to correct for his shortsighted purposiveness is to imagine personified entities with various sorts of super natural power, i.e., *gods*. These entities, being fictitious persons, are more or less endowed with cybernetic and circuit characteristics.

In a word, I suggest that the supernatural entities of religion are, in some sort, cybernetic models built into the larger cybernetic system in order to correct for noncybernetic computation in a part of that system.

I do not believe anybody has said this but I do not think that this view of religion contradicts what has been said by others – the religious, the mystical, and the scientific. There is therefore no conflicting hypothesis against which mine can be tested.

IN THE BEGINNING, ALL WAS MUSH; AND THE MUSH WAS WITHOUT FORM AND VOID.

I have been reading over **The Cloud of Unknowing**[2] and most of the traps against which the author warns the would-be contemplative are precisely the patterns of purposive thought.

If I am right, my hypothesis will provide an almost totally new way of analyzing religious ideas and religious behavior. We shall have to ask, for example, what sort of corrective is introduced into an otherwise purposive system by the Mass. In this connection, it looks to me as though the whole Catholic insistence on the "reality" of the metaphoric statement "This is my body" is a command to approach the ritual in terms of primary process.

Totemism in its preheraldic forms also seems to be a constructing of cybernetic models using identification or empathy with animals.

There are also a lot of questions regarding psychotherapy. When the therapist catalyses group processes, is he in fact demonstrating a cybernetic model to his patients?

Are there any cybernetic systems made of hardware in which cybernetic models have to be embedded in order to correct for lineal computation?

I wonder a good deal how much of this should be considered at Burg Wartenstein.

Or am I crazy?

Our conference comes along pretty well. We now have fairly sure affirmatives from Peter Klopfer, Gertrude Hendrix, Will Jones, Taylor Pryor, Erik Erikson, Barry Commoner, Ted Schwartz, and Geoffrey Vickers, and doubtful affirmatives from Anatol Holt and Konrad Lorenz. These, at any rate, are sufficiently affirmative for their names

to be given out. Donald MacKay unfortunately could not come, nor Evelyn Hutchinson.

I am looking for a good theologian, preferably one who will combine both comparative religion and pastoral experience. Aoki would have been wonderful and wanted to come but could not.

Well, please tell me what you think. I think that the idea which I have sketched above is the biggest thing I have bumped into yet.

IF I AM RIGHT, MY HYPOTHESIS WILL PROVIDE AN ALMOST TOTALLY NEW WAY OF ANALYZING RELIGIOUS IDEAS AND RELIGIOUS BEHAVIOR.

May the season make sense to you and yours.

Yours sincerely,
Gregory ■

1. For more on Lorenz's drawings see Bateson's **Mind and Nature** (NWEC p. 28), p. 156.

2. **The Cloud of Unknowing**, author unknown (probably a late fourteenth century parson); translated by William Johnston; 1973; $3.95 postpaid from Doubleday and Company, 501 Franklin Avenue, Garden City, NY 11530.

Ryder's Standard Geographic Reference

Black and white Landsat satellite photos of every square mile of the United States. Each photo inch equals 15.8 miles. Whether you're travelling by car, airplane, in memory, or in imagination, this collection gives you God's view – watching the sparrow fall and watching you crawl across the hide of a complex and wondrous beast. The book is a grabber. Every spot you thought you knew well turns out to have great big surprises around it, connected to other big surprises, and pretty soon you're late for dinner. —*Stewart Brand*

[Suggested by James Kirkland]

Ryder's Standard Geographic Reference
1981; 213 pp.
$52.95 postpaid

Overlay plotting guide
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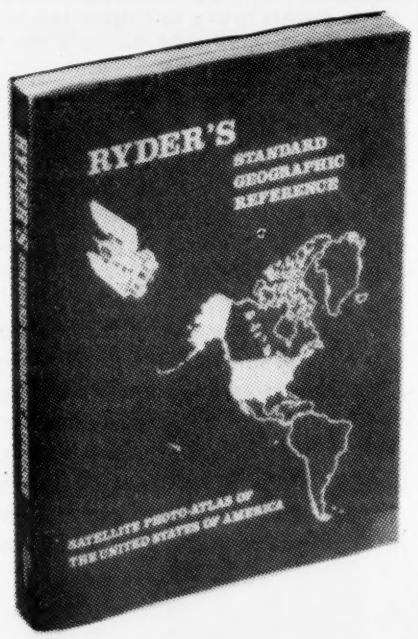
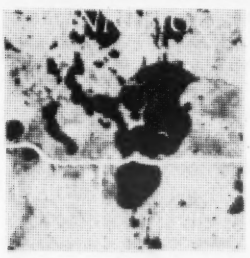
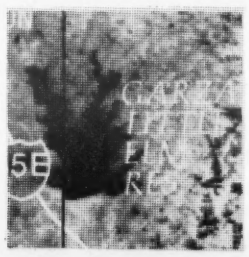
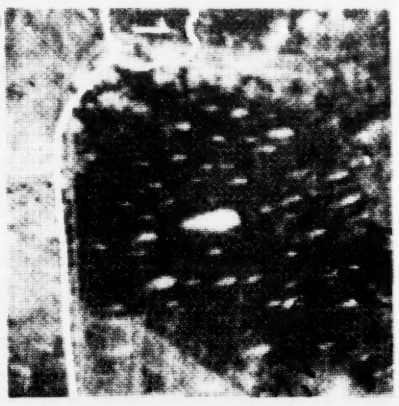


LAKES (NATURAL) are generally smooth sided and roundish or oblong.





LAKES (MAN-MADE) are typically distinguished by intricate branches. Identified in atlas as reservoirs.



TREE ISLANDS (HAMMOCKS) indicate higher terrain in a marshy or swampy region. Their linear shape is defined by the general direction of water movement. Example is in Everglades.

Smithsonian Time Line

If you're an admirer of evolution you've got to get yourself one of these. I got mine last week and I hung it next to my desk beside some photos of relatives. It's the ultimate **Roots**.

—Steve King

Smithsonian Time Line
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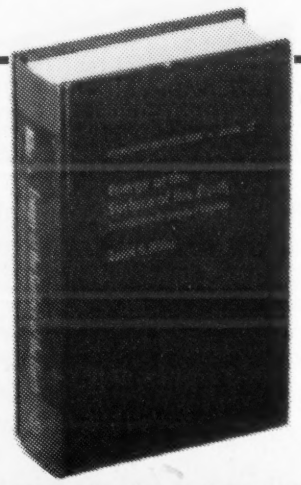
SOFT TECHNOLOGY

Energy at the Surface of the Earth

This long book is a pleasure to read. It discusses what is going on around us as we warm and cool under the sun. Its topics include radiant exchange with the sky (solar energy in, long-wave radiation in, more long-wave radiation out), energy used in photosynthesis (a tiny percentage), energy taken in and given off by water going back and forth between its three states, and energy stored and released by the Earth as it warms in the spring (the bare trees let the sun through to the ground) and cools in the fall. The book does not stop with these broad categories. It includes discussion of energy in cities and of the potential energy stored in the Sierra Nevada snow pack (this water later falls through hydroelectric plants — driving distant pumps which lift water up to irrigate dry flatlands).

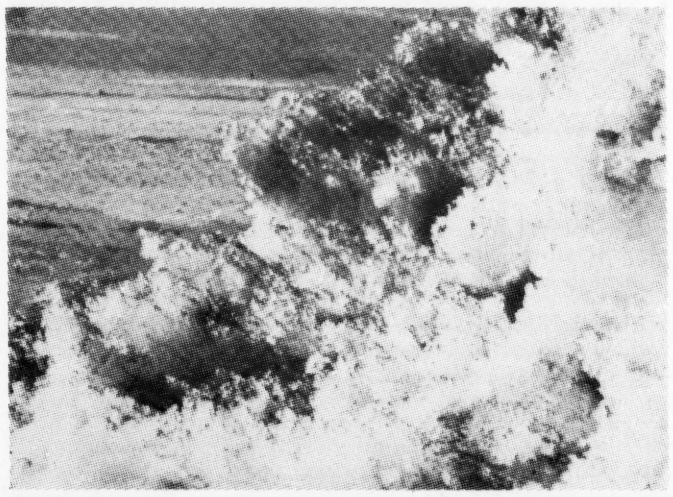
The book is like a thousand stanzas of a giant energy-budget poem. You can read long or short sections of it at any sitting; you never lose the thread. It is all watts per square meter. At first you are somewhat shocked by his tireless numbers, his watts per square meter. He advances on every aspect of climate and the earth's surface with numbers and more numbers. Even when they can't be very accurate he does not abandon the numbers; he is confident of their eventual conquest. The robot woos nature and is received by her. Miller's wide knowledge and clear writing make watts per square meter and wild nature a happy couple. —*Steve Baer*



Energy at the Surface of the Earth
(An Introduction to the Energetics of Ecosystems)
David H. Miller
1981; 519 pp.
$25 postpaid from:
Academic Press
111 Fifth Avenue
New York, NY 10003

•

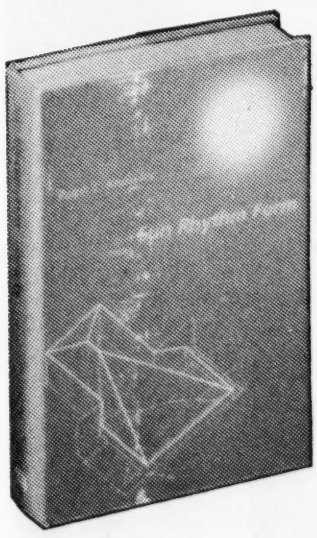
The direct solar beam can provide valuable heat to organisms, even in winter, if they present the right angle to it. Sun scald of tree trunks results from solar heating of the sun-facing side. Peccaries in Arizona reverse the nocturnal heat loss of 155 W m^{-2} and gain 23 W m^{-2} during the day. Lizards that bask on sunny days can remain active all winter. Insects in the summer Arctic and at high altitudes in the midlatitudes make use of the direct beam, especially as focused by the Arctic poppy mentioned earlier. This symbiosis is an ingenious conversion of solar energy to warm an insect enough for its wing muscles to function so it can fly with the pollen it has picked up. A mutual dependence of plant and insect that has evolved over the ages is powered by the direct beam.



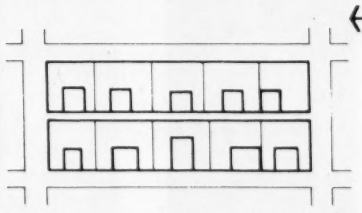
Sun-facing pits and points of a city snow remnant in late February 1978 on a dry, cold day when beam radiation was dominant over area-source solar and longwave radiation. Points move to follow the sun, and the next morning still indicate where it set on the day before.

Sun Rhythm Form

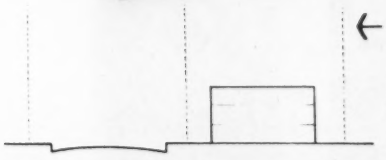
Ralph Knowles has a well-deserved reputation for being at the forefront of solar thinking. His point of view is often radically different than the commonly accepted ideas, and this difference is especially noticeable because of the public penchant for appropriate technology righteousness whether it makes sense or not. In his earlier **Energy and Form** *(NWEC p. 175) he examined solar energy as a fundamental aspect of community at a time when most authors were concerned only with solar houses. He continues his big-picture analysis in this exploration of how entire communities can be planned for maximum solar advantage. He proposes the concept of a "solar envelope" — a volume surrounding a structure and defining its rightful access to the sun according to season. The discussion, with accompanying diagrams and models, is rigorous and requires some discipline to read, but the rewards are many. For here at last is a useful way to deal with "solar rights" instead of merely howling about them. This is one of those books that really teaches you something.*
—*J. Baldwin*



Sun Rhythm Form
Ralph L. Knowles
1982; 294 pp.
$25 postpaid from:
MIT Press
28 Carleton Street
Cambridge, MA 02142
or Whole Earth
Bookstore



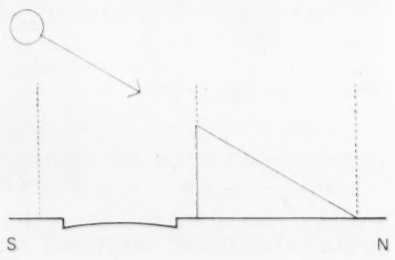
← **In the colonial towns of ancient Greece, planners made orderly arrangements that took maximum advantage of the sun. Blocks that ran long in the east-west direction generally contained ten houses, five on each side. The houses varied in their size and in their configuration, but they were consistently built around a south-facing court. Consequently, while the house was always entered from the street, and in that sense had a street front, the house was also oriented to the sun and had a sun front.**



← **While ownership includes all space to vertical limits at land parcel boundaries, buildable space is much more precisely limited in height. To provide for light and access, buildable limits have generally been set back from ownership limits. The result is generally a rectangular container with traditional vertical and horizontal faces.**

→

The new solar limits that derive from the sun's movement are more likely to be sloping, because they are related to the sun's geometry.

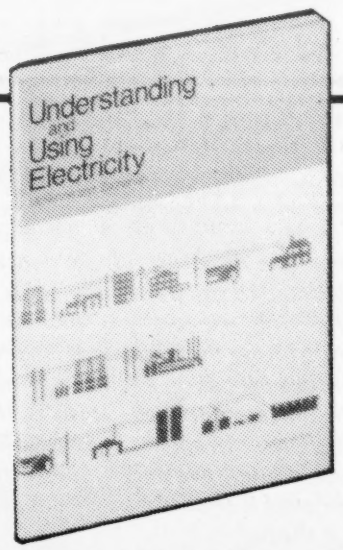


Understanding and Using Electricity

This book is almost unbelievably good at getting across practical knowledge of electricity. No talking down to you as if you were a dumb punk in a vocational training program. No paramilitary authority to get past. No author subconsciously guarding his specialty from interlopers. How come? Because it's written for farmers who need to know how to maybe put a big fan in their hayloft. No nonsense at all, and illustrated wall to wall. This is absolutely the best and most useful electricity text I've seen, and I wish other text writers would use it as a model. Life would be a bit easier for all of us.

—J. Baldwin

Understanding and Using Electricity
Bruce A. McKenzie and Gerald L. Zachariah
1975, 1982 2nd Edition; 97 pp.
$3.50 postpaid from:
Interstate Printers and Publishers
19-27 North Jackson
Danville, IL 61832
or Whole Earth Bookstore



•

The smaller the wire or the longer the circuit, the more the voltage will be decreased from one end of the line to the other by resistance. This is known as voltage drop.

Voltage drop is costly to the consumer in two ways:

1. Part of the power measured and paid for at the meter is wasted by overcoming resistance (usually producing heat in the circuit) and is not available for use at the appliance or other load.

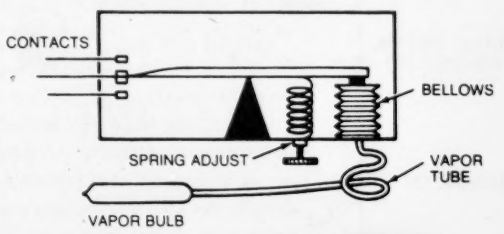
2. Loss of power in the wiring means an even greater loss in the operating efficiency of equipment. A 5 percent voltage drop, for example, produces a 10 percent loss of heat in any heating appliance, or a 17 percent loss of light from an incandescent bulb, or a 10 percent loss in power output of a motor.

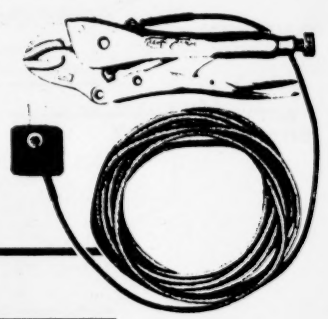
•

The round prong on a 3-wire grounding plug should not be removed. It is installed for the operator's safety protection. It does no good to plug the three-pronged grounding plug into a socket that does not have a grounding conductor which goes to the service panel. In metal conduit wiring systems, the conduit forms the grounding conductor, but in nonmetallic sheathed cable such as is commonly used in houses, barns, and home shop areas, the wire must carry a grounding conductor.

If the power outlet being used does not have a grounding conductor back to the service panel, a separate wire with a strong, aggressive clip can be used to temporarily complete the grounding.

The common thermostat uses a bulb filled with a gas or a liquid which expands or contracts with changes in temperature.... This type of thermostat has the advantage in that the sensing element can be installed at a distance of several feet, if necessary, from the switch control mechanism.





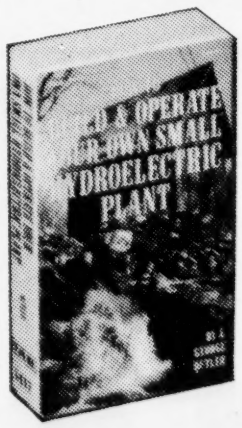
Portable grounding conductor. The plug is a standard 2-wire to 3-wire adaptor with a grounding lead, but with the pigtail replaced by the long grounding wire. The vice-grip must be firmly clamped onto a water or other metal pipe or metal ground conductor that is bonded into a continuous electrical conductor back to the electrical ground at the main service panel.

How To Build & Operate Your Own Small Hydroelectric Plant

Here's Dirty-Hands Hydro explained step by step, including the contributions of Murphy of Murphy's Law fame. It's hard to write a book like this because each hydro site is so different and the needs of users vary so much. One way is to write an account of what one person did and why, which is what Butler has done. The basic principles should carry over to just about any situation. As with most TAB books, this one is easy to understand.

—J. Baldwin

How to Build & Operate Your Own Small Hydroelectric Plant
J. George Butler
1982; 304 pp.
$11.95 postpaid from:
TAB Books
P.O. Box 40
Blue Ridge Summit, PA 17214
or Whole Earth Bookstore



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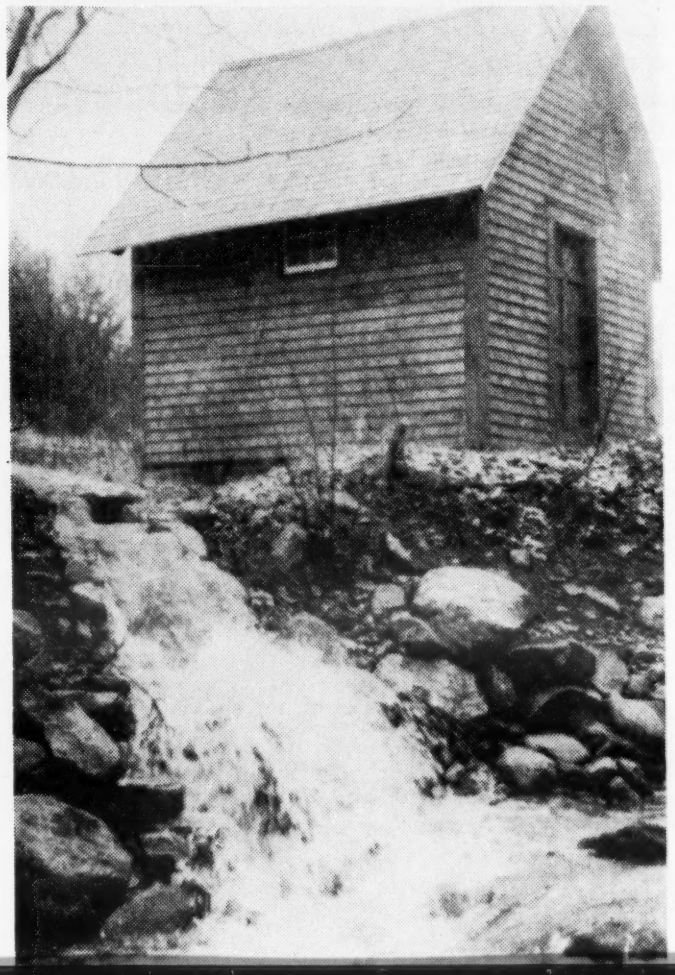
In discussing Dr. Kleinschmidt's idea that a pump would serve as a turbine, if it were simply run backwards, I had many knowledgeable people tell me it would not work. One said: "A pump is a pump, not a turbine. If it were, it would be called a turbine." Quite irrefutable logic, save for the fact that language is at best an inexact instrument for expressing ideas.

To answer this objection, Steve called my attention to the literature put out by some pump manufacturers, extolling this very feature when their pumps were used in skyscraper air conditioning systems. Once water is pumped to the roof-top cooling towers, and trickles down through the cooling vanes, it then falls directly back to the basement. This fall of hundreds of feet is harnessed, enabling the system to recover at least 50 percent of the energy expended to pump the water up to the roof. The same pumps, running in reverse, became turbines.

Hydroelectric powerhouse with spillway cascading down to the brook



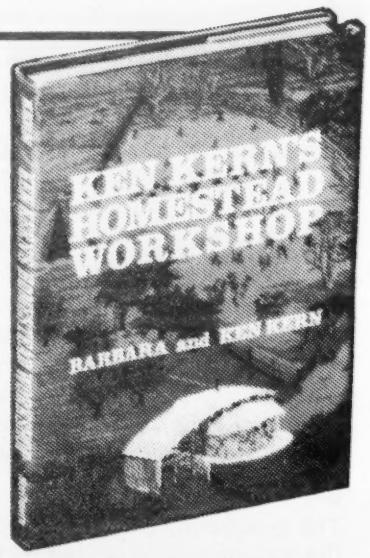
Ken Kern's Homestead Workshop

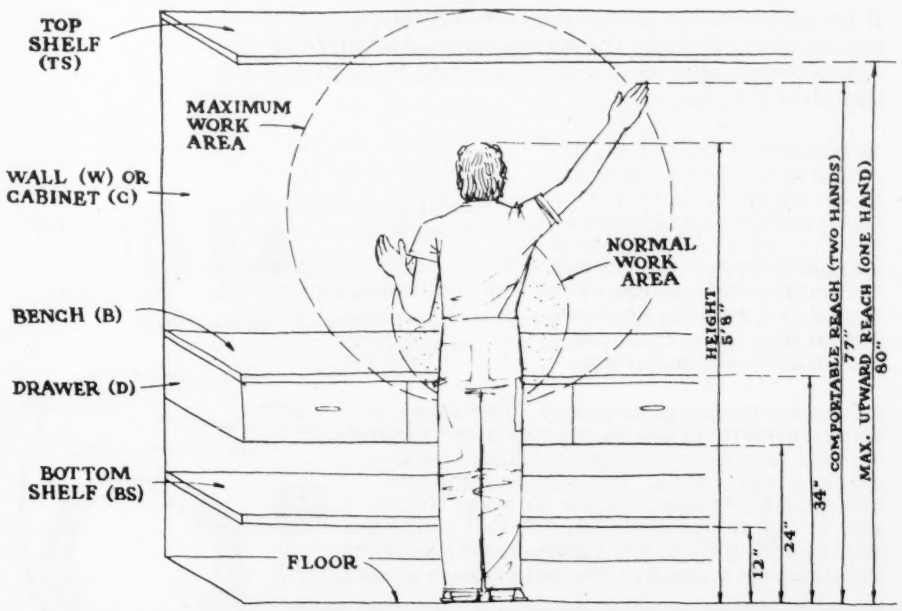
Well . . . Ken's shop is so different from mine, yet I gotta agree with just about everything he's showing in this uniquely personal book. He and his wife Barbara cover the entire shop bit — from construction of the actual structure to the use of the tools. Hand tools. Nonelectric hand tools, especially. They end the book with a case history of how they invented, made, and refined an all-purpose cart as an example of how their shop and themselves interact so well. It isn't often I say "I wish I'd written that," but I'm saying it now. This book is certainly the most informative and proper-attitude-inducing I've seen, and it should be very helpful to anyone ready to do a shop.
—J. Baldwin

Ken Kern's Homestead Workshop

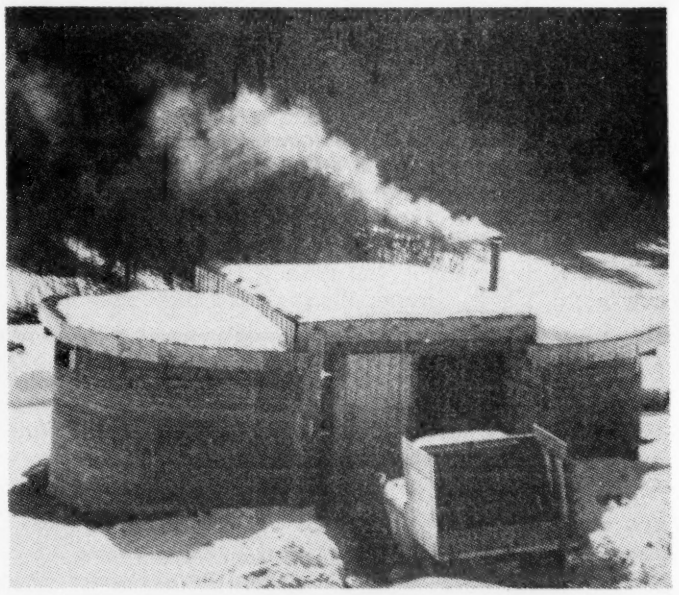
Barbara and Ken Kern
1981; 166 pp.

$18.20 postpaid from:
Charles Scribner's Sons
Special Sales Dept.
597 Fifth Avenue
New York, NY 10017
or Whole Earth Bookstore





Any piece of iron over 5 feet in length is stored outside the shop in a so-called boneyard. Before starting a metalworking project, we poke around in this area to find essential iron with which to build something new or to repair something old. Any shop that fails to have a well-stocked boneyard is poorly equipped. It may include angle iron from bed frames, old pipe and metal rods, iron wheels, and lengths of flat steel and sheet iron. No metal object on the homestead should ever be discarded. Rather, pile it up in this scrap yard for future use.

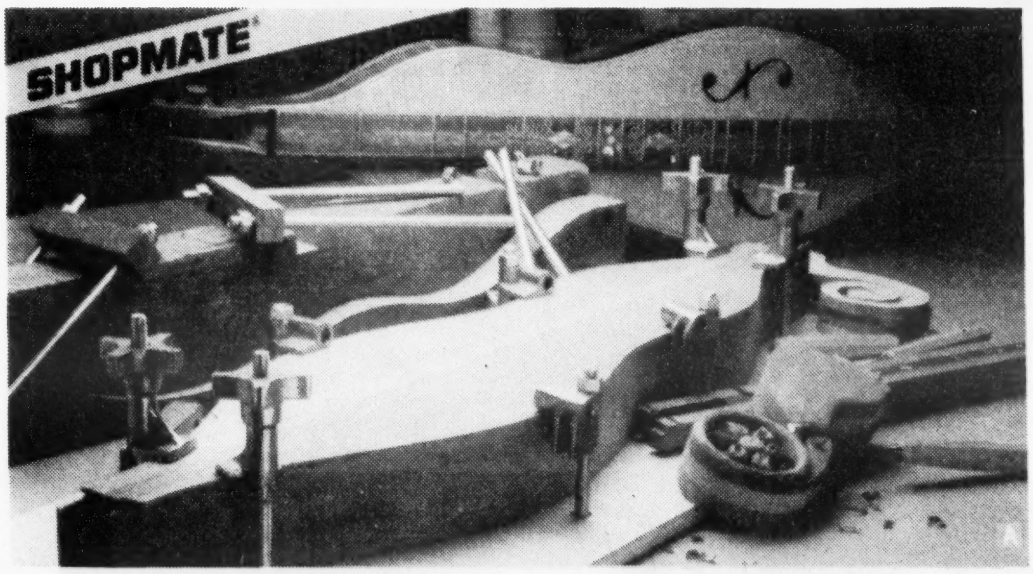


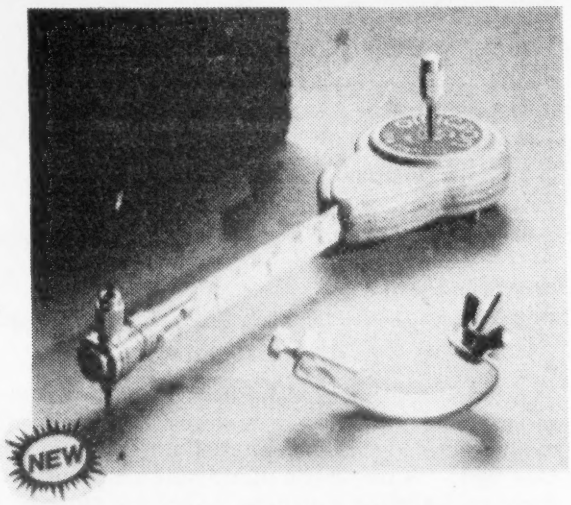
Ken Kern's workshop: Metalworking and tool maintenance to the left, woodworking to the right, a large, empty project area in the center, and a vehicle repair pit in front.

Better Woodworking Catalog and Guide

This catalog/guidebook is put out by the folks who bring us the multipurpose Shopsmith power tool. I don't care for the Shopsmith myself as it is not intended for the heavy-duty work I do. (It's great for lighter stuff like cabinetry.) But this catalog features some nifty stuff that I've not seen elsewhere. I'm particularly impressed with their Shopmate Maxi-Clamp, which is as octopussy a device as you are likely to see. I've ordered one for myself.
—J. Baldwin

Better Woodworking Catalog and Guide
Catalog
$1 from:
Shopsmith
The Home Workshop Company
750 Center Drive
Vandalia, OH 45377



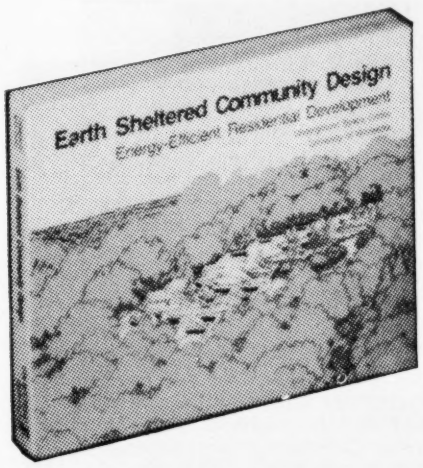


Unique beam compass measures and draws radii from 2¾" to 80" accurately and easily. — $25.

Maxi-Clamp used in dulcimer making. Each set of threaded rods, fasteners and clamps costs $49.

Earth Sheltered Community Design

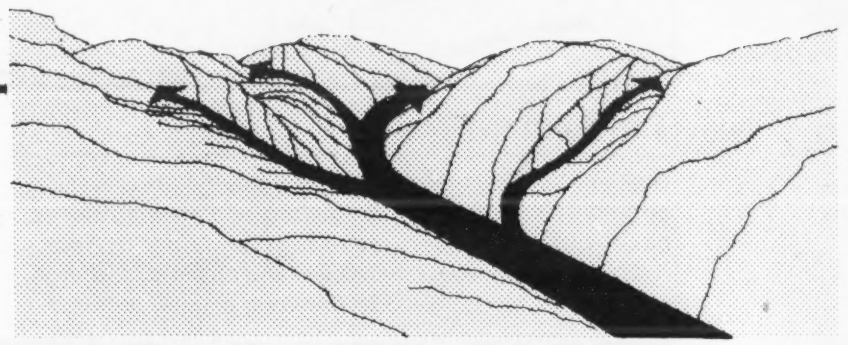
The underground folks are hard at work these days now that their work has been recognized and a good bit of the hype reduced to practice. The inevitable Next Step — whole communities — is herein discussed and compared with conventional building investments. My guess is it won't be long before several of the schemes shown here are actually built. The ideas are too exciting to ignore. —*J. Baldwin*



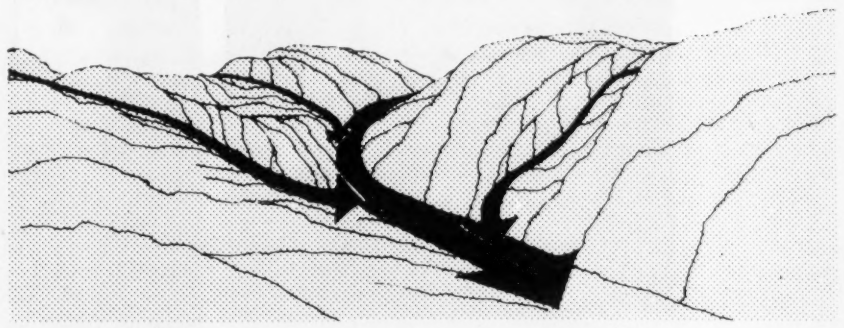
Earth Sheltered Community Design
(Energy-Efficient Residential Development)
Dr. Raymond Sterling, John Carmody, and Gail Elnicky
1981; 270 pp.

$15.81 postpaid from:
Van Nostrand Reinhold Company
Order Department
7625 Empire Drive
Florence, KY 41042

or Whole Earth Bookstore



Daytime cold airflow



Nighttime cold airflow

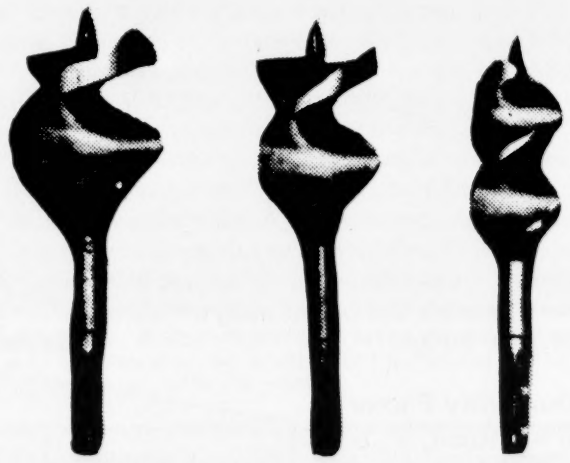
In valley areas the cold air drains down from the higher elevations at night and flows up the valleys from the low protected areas during the day. Locating housing along these air drainage areas allows designs to take advantage of the natural ventilation provided by this phenomenon. The middle ranges of the slopes would be the optimal zones for development, since they offer protection from the cold in winter and from the warm air flows in summer.

Fox Maple Tools

Where do you get wooden-boat-building tools? Here. They have stuff for timber framing too — all good quality.
—*J. Baldwin*

Fox Maple Tools
Catalog

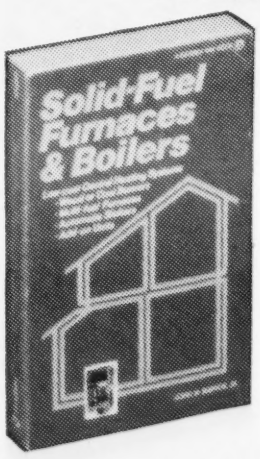
free from:
Fox Maple Tools
R.R. No. 1 Box 583
Snowville Road
W. Brownfield, ME 04010



This extra rugged Greenlee bit is the one we use for taking out large amounts of wood in mortices on timbers. For use in electric drills, these bits leave very little wood to be chiseled out. Our 2" bit is one of our most frequently used tools. In timber framing you should recover cost in time saved in one day — we did. 1"-2½"; $12-$52.50. Three-piece set, $118.75.

Solid Fuel Furnaces & Boilers

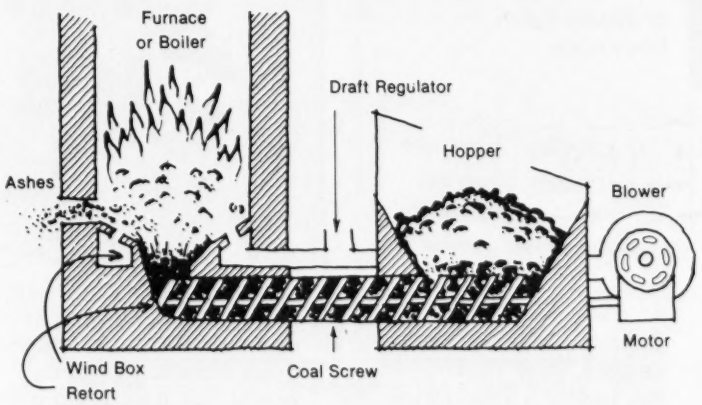
I can remember when my Daddy joyfully announced the removal of our terrifying, snorting, smelly, dusty, noisy, coal-dragon furnace. Oil burners were so much nicer. Now we're heading back to the coal or wood furnace for homes that need a furnace. (You should do a thoughtful analysis first.) The new machines are a lot easier to live with but there aren't all that many folks around who remember how to deal with them. Here's where you find out the basics. —*J. Baldwin*



Solid Fuel Furnaces & Boilers
John W. Bartok, Jr.
1982; 216 pp.

$9.95 postpaid from:
Garden Way Publishing
1515 Ferry Road
Charlotte, VT 05445

or Whole Earth Bookstore



Underfeed stoker: In this type of stoker, the fuel is fed upward from underneath the furnace or boiler. The fuel is carried from a hopper or bin to the retort by the action of the screw. Variable rates of feed and therefore fire level are possible. The air for combustion is supplied from a blower and air tube to a wind box surrounding the retort. Besides the thermostat and limit switches, a hold-fire control is used to maintain the fire during mild weather. The underfeed stoker is easier to use when converting a hand-fired furnace or boiler to an automated one.

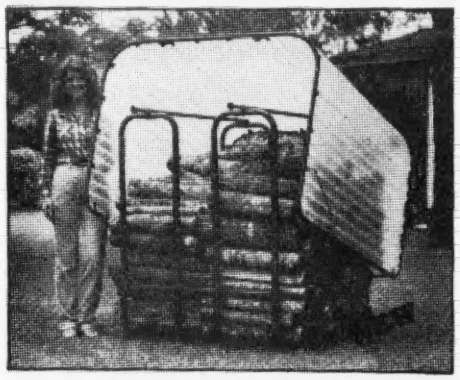
The Warming Trend

Gear and niftiness for the well-tempered domicile. Not only handy doodads for the heating and cooking stoves, but air circulators for room to room and floor to floor, cold stoppers at doors, windows, and crevices, and such splendid oddments as a $30 firewood dryness meter, a quality lightbulb life-extender, a chainsaw tool holster, a portable woodshed, and a spill-free kerosene can.

Nicely made catalog. I predict success. —Stewart Brand

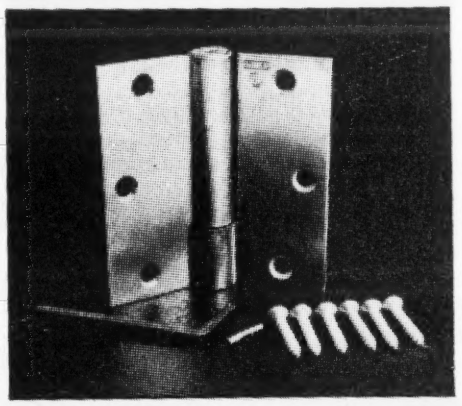
The Warming Trend
Catalog

$1 from:
The Warming Trend
Box 1184
Manchester Center, VT 05255



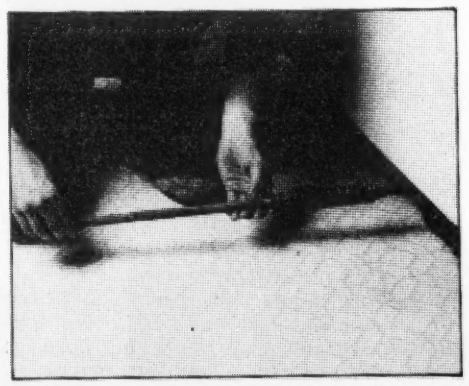
ATTRACTIVE EASY-ACCESS WOODSHED KEEPS ½ CORD DRY
Before you build a wood shed, compare the cost of your idea with this one. Chances are this one is less expensive, better looking, and faster to put up. It surrounds the stack with an easy-to-tilt cover that is perfectly balanced for one-handed operation. When empty, the rack is portable. Made of heavy tubular steel with a textured fiberglass cover, it measures 5′ long closed, 7′8″ open x 4′4″ high closed, 5′9″ open x 4′8″ high.

5674 Woodshed (½ cord)..... $295.00
5675 High-wind earth anchor $9.95



REPLACEMENT HINGE CLOSES DOORS AUTOMATICALLY
Are your children always leaving doors open? Do you leave them open while you set packages down? Unobtrusive hinge looks just like a regular hinge, but has an adjustable spring that closes doors behind you, saving all that normally wasted heat. Easy to install, only one needed per door, 3½″ or 4″ size fits most residential doors.

5645 Self-closing hinge (3½″) $9.50
5646 Self-closing hinge (4″)..... $10.75



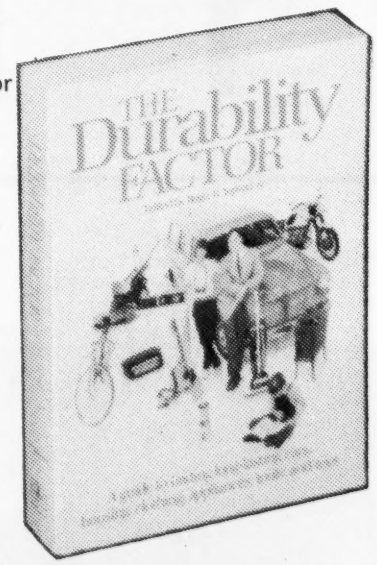
SAVE ELECTRICITY WITH REFRIGERATOR COIL CLEANING BRUSH
It's a fact that dirty condensing coils on refrigerators and freezers waste money. Due to their design, many coils are almost impossible to clean effectively without this brush. Pays for itself many times over.

5500 Coil brush $4.95

The Durability Factor

Is it really true that they don't build 'em like they used to? Well, this big bite of a book answers "it depends" when you take into account all the arguments, counter-arguments, emotion, rumor, myth, and hard facts. The book is highly useful to someone attempting to buy smart; what-to-look-for is given along with well-reputed brand names and models. How we got into the seeming mess we are in is well attended by a number of folks including me and R. Crumb. What we can do about it is also discussed with more hope than is perhaps warranted. Altogether a readable, useful trip along the consumer-manufacturer border. —J. Baldwin

The Durability Factor
Robert B. Yepson, Jr., Editor
1982; 360 pp.
$14.95 postpaid from:
Rodale Books
33 East Minor Street
Emmaus, PA 18049
or Whole Earth Bookstore



DEAR SIR—
I AM A U.S. NAVY DEEP SEA DIVER, AND LOST THIS LIGHTER LAST FALL. FOUND IT LAST WEEK. PLEASE TRY TO REPAIR IT.

•

James Scism, of Residential Refrigerator Repair in Poughkeepsie, New York, advises, "If I was a consumer going out to buy a new refrigerator, I would buy a standard unit — with no timers, no heater, no defrost thermostats, and all that crap — as simple as I could get it. But you've got to order it. You used to have to order self-defrost; today you have to order standard." He has found that as a rule, the more expensive the refrigerator, the more likely it will break down.

•

If you want a durable camera, shop for the simplest camera in the highest price range you can justify.

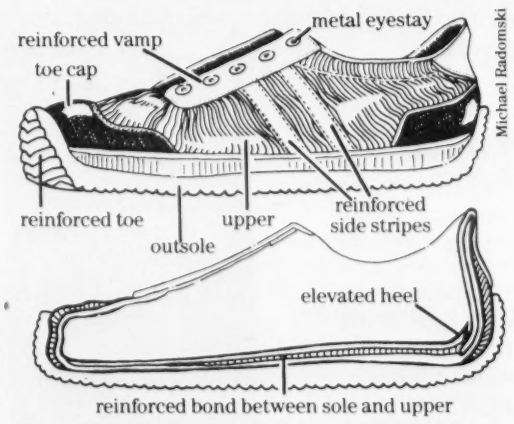
•

"It has often been suggested," wrote economist S.J. Prais in 1974, "that a longer length of life has not been chosen because light-bulb manufacturers would lose in sales; and that manufacturers have been in a position to fix a shorter life as a result of national and international agreements."

Actually, there is no light-bulb conspiracy. To make a bulb burn longer, its filament must merely be made sturdier; but a thicker filament uses more electricity. It's a trade-off, then, between energy efficiency and durability.

•

Take, for example, Vermont Castings' Vigilant and the Portland Stove Foundry's Atlantic 228, both handsome American iron fireplace stoves of remarkably similar appearance, with power output in the range of 40,000 BTUs per hour. The Vigilant is a popular stove and a successful piece of design; the Atlantic 228 has been less successful, plagued by design flaws. Iron stoves are assembled from separate plates with interlocking joints, sealed with refractory putty and held together by bolts. A poorly designed joint may spread when the plates are heated, causing an air leak that may result in a runaway fire and serious overheating. Such was the major design flaw of the 228. This could easily have been prevented by designing the joints so that thermal stress pulled them more tightly together, as in the Vigilant, rather than spreading them apart.



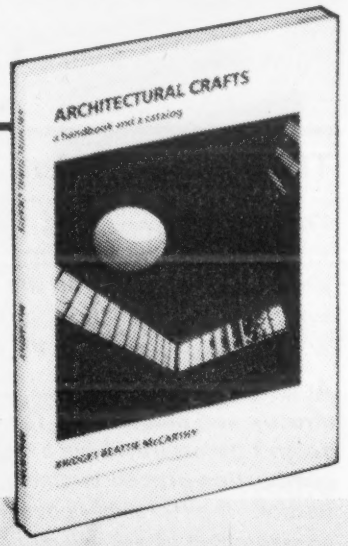
The cobbler's lexicon.

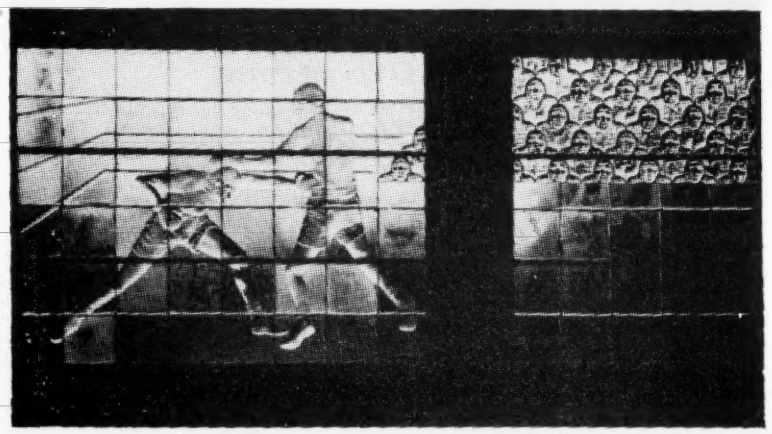
Architectural Crafts

The re-emergence of crafted detail and accessories in buildings — both public and private — is a good sign. But how do you find the right craftsmen, what are the expectations of the various parties involved, how do the business nuts and bolts work? This book gives many of the answers. Even an annotated sample contract is included. In the catalog section over a hundred craftsmen from ten western states (selected in competition by a jury) are listed with examples of their architecturally integrated work and an outline of their usual business arrangements.

—Dave Deppen

Architectural Crafts
(A Handbook and a Catalog)
Bridget Beattie McCarthy
1982; 150 pp.
$11.95 postpaid from:
Madrona Publishers
2116 Western Avenue
Seattle, WA 98121
or Whole Earth Bookstore





Delridge Community Center, Seattle. This 6-by-13-inch window was a percent-for-art project. Paul Marioni worked with the architect from the beginning of the project to develop a suitable space. The glass was cast in molds designed by Marioni to make cast glass feasible for architectural use. The building houses the state boxing program.

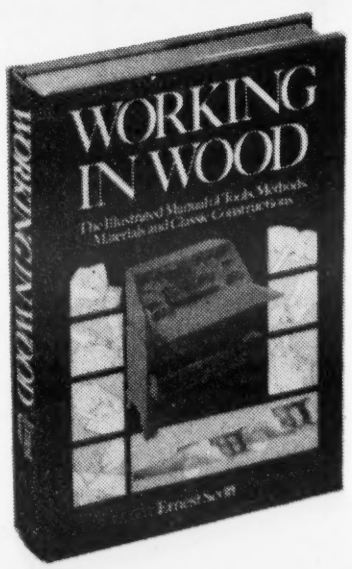
Sunken tub. Joseph Pardington was told where the tub would go, and worked within the limitations of the space in consultation with the client.

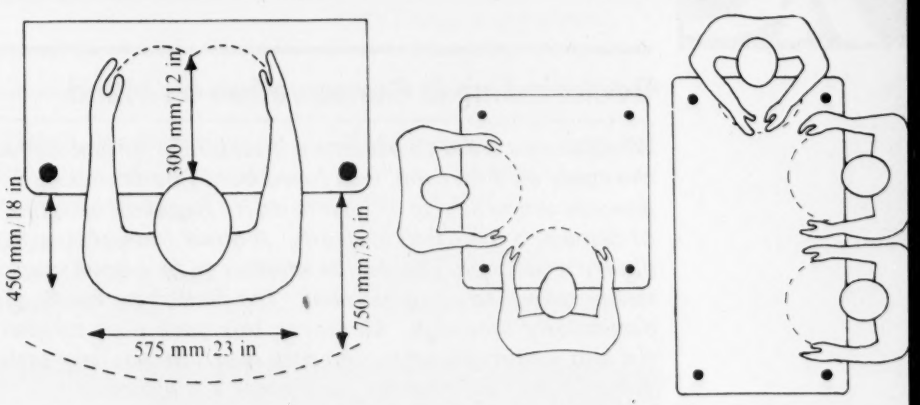
Working in Wood

*I've been a self-taught woodworker for almost ten years, off and on, so I have some experience. I've been looking for a good book on woodworking with hand tools and the power tools that a homeowner or a one-person shop might have available. Ernest Joyce (***Encyclopedia of Furniture Making, NWEC** *p. 253) talks about larger scale production methods. Tage Frid's books (***NWEC** *p. 252) are excellent but limited in scope. This book is exactly the one I was looking for. Scott is not only a woodworker but a teacher of woodworking: his explanations and illustrations are clear and concise. They have to be, because in one book he covers woodworking from the tools a beginner needs and how to use them through the techniques for both individual joints and putting the whole piece of furniture together. There are sections on wood and its characteristics, and on hardware: what's available and where to use it. The hardware section is the only place where Scott's British background causes frustration: he describes many clever pieces of hardware that would have solved problems I've run into but that I've never seen available in either hardware stores or mail-order catalogs.*

—Chuck Lakin

Working in Wood
(The Illustrated Manual of Tools, Methods, Materials and Classic Constructions)
Ernest Scott
1980; 272 pp.
$26 postpaid from:
G.P. Putnam and Sons
1050 Wall Street
West Lyndhurst, NJ 07071
or Whole Earth Bookstore



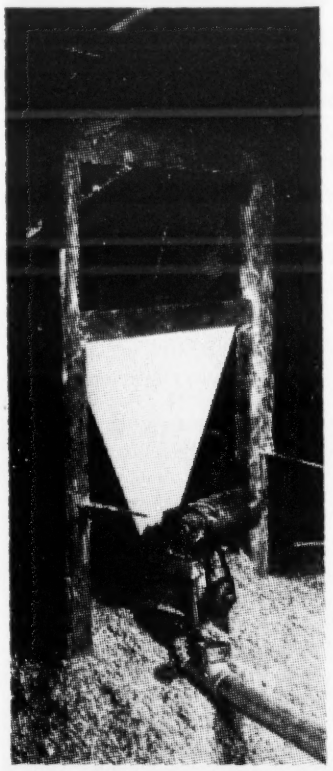


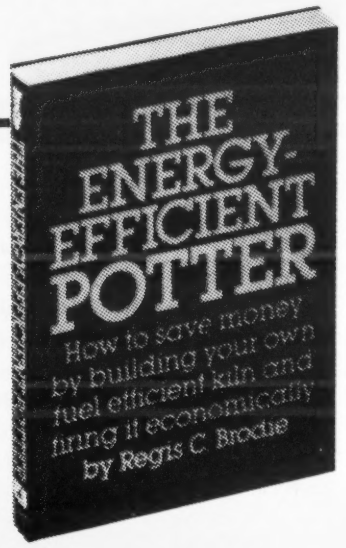
The key dimensions, when deciding the size of the table top and the position of the supporting structure, are a width of 23 in per person, allowing for a reasonable amount of elbow room, and a clearance of 12 in from the edge towards the center of the table for the sitter's legs. When one is seated at a table, the back of the chair is usually about 16 in to 18 in from the edge of the table; allow, therefore, a minimum of 30 in from the edge of the table for circulation. A square table will take four people comfortably. A rectangular table provides greater seating capacity than a square one of the same area. The minimum comfortable width for a rectangular table is 30 in. The minimum diameter for a round table — the most sociable shape — is 40 in to seat four people. An oval table combines the best qualities of the round and rectangular tables. (Table-leg positions are indicated by black dots.)

The Energy-Efficient Potter

The days of energy that's "too cheap to meter" are over, and the artist is not exempt. Particularly hard-hit by the diminishing supplies and the associated rising costs of energy is the ceramist: firing a kiln is one of the most energy-intensive processes in the production of art or craft.

At long last, here is a book that addresses this problem directly and practically. It's written for the potter, who doesn't necessarily have a background in heat transfer and combustion-process engineering — or even basic technotwitics. It extensively covers everything from step-by-step construction of energy-efficient kilns and retrofitting of existing kilns to efficient firing technique and working methods. There are even sections on alternative fuels and waste-heat recovery. As Brodie says, "Everything here works and the future is now." —Scott Englander





The Energy-Efficient Potter
Regis C. Brodie
1982; 206 pp.
$12.95 postpaid from:
Watson-Guptill Publications
2160 Patterson Street
Cincinnati, OH 45214

A sawdust-injection system is simply this: taking sawdust and blowing it into a hot firebox, where it will spontaneously ignite and produce more heat. . . . This is the heart of the system — a V-shaped bin made of 16-ga. steel. The sawdust is shoveled onto the screen above the bin. The bin needs to be filled about once an hour. The auger then feeds the sawdust out of the bin, where it is sucked up through the plastic pipe that leads to the blower and on to the kiln.

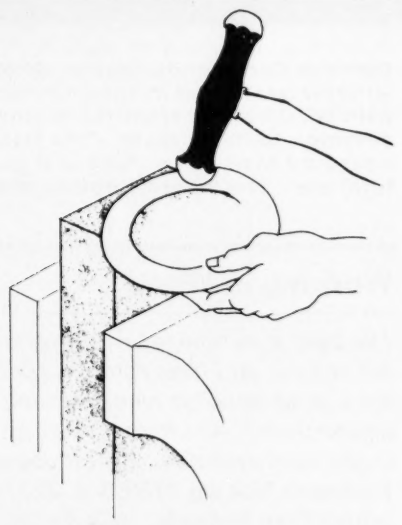
Pierced silver bookmarker. Frances Loyen, 1975.

The Thames and Hudson Manual of Silversmithing

This book feels and looks as elegant as the inspirational work shown, and as is common with most well-written texts, it takes you to the point where you'll be ready to caress a piece of that beautiful metal. The instructions, explanations, and illustrations are much more detailed than in many similar books. —J. Baldwin

The Thames and Hudson Manual of Silversmithing
Frances Loyen
1980; 192 pp.

$9.95 postpaid from:
Thames and Hudson
W.W. Norton and Co.
500 Fifth Avenue
New York, NY 10036

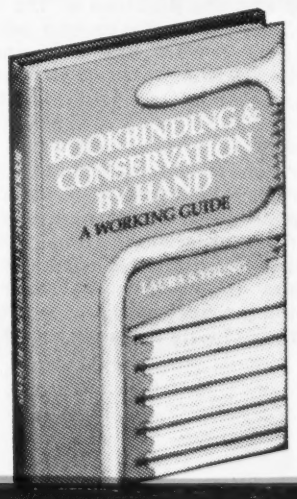


Sinking: The principle is to direct the blows of the hammer on the inner or concave surface of the metal, while resting what is to be the rim of the tray on a piece of wood. The metal is sunk on air, having nothing beneath to support it.

Bookbinding & Conservation by Hand

Whether you want to become a bookbinder or just replace the cover on a favorite, well-loved book, **Bookbinding** *will give you sound advice on how to do it. Repair of all types of damage is discussed in depth. A quick look at it in the library would help you decide whether to fix a book yourself or take it to a professional. The section on binding is particularly thorough. Moreover, this book feels substantial and well-made when you pick it up. It was very satisfying to read the chapter on the makeup of books and to see that I was holding a fine example in my hands.*
—Marilyn Green

Bookbinding & Conservation by Hand
(A Working Guide)
Laura S. Young
1981; 273 pp.
$37 postpaid from:
R.R. Bowker Company
P.O. Box 1807
Ann Arbor, MI 48106



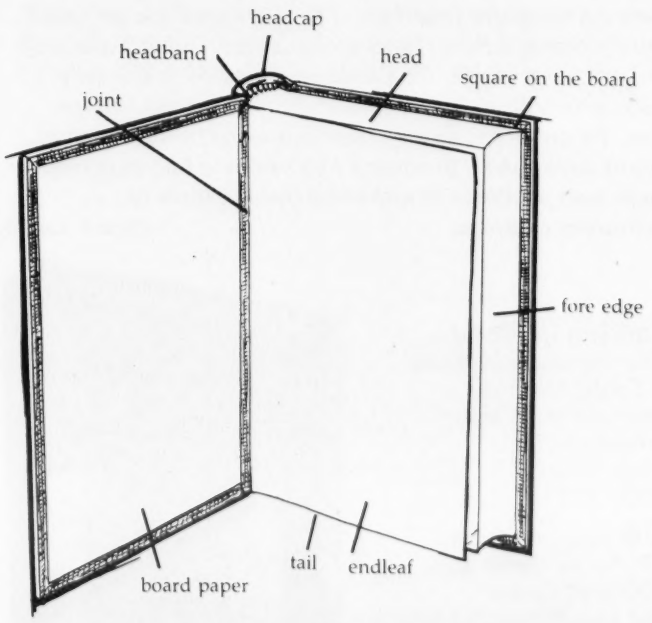


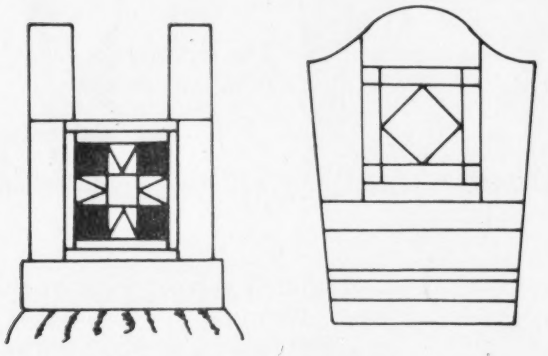
FIGURE 1-2.

Quilted Clothing

Instructions for creating more than a hundred garments both from original patterns and adapted from commercial patterns. The section on finishing and decorative embellishment is fine as are the many full-color photographs. An inexperienced sewer could take this book in hand and make a garment he/she would be proud to wear on the street. There are also ideas for more accomplished artists. Designs vary from quite conservative to flashy and flamboyant outfits that would wake up your neighbors.

—Marilyn Green

Quilted Clothing
Jean Ray Laury
1982; 154 pp.
$19.45 postpaid from:
Harper and Row
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth
Bookstore



It will be simple to add a quilt block or pieced design to a garment if you have an appropriate pattern. Some garments have areas such as yokes, cuffs, insets — or any parts cut on the straight — that literally ask for some decorative embellishment. A jumper top, for example, provides a perfect spot for an insert.

Clam Shell Vest. Choose any simple vest pattern, and cut a pocket to match the rounded front corner; the pockets of the vest shown in the photograph are 9" wide and 10" high. The pocket is cut from solid-colored fabric, and the 3" circles that make up the clam shell motif are appliqued to the pocket. Clam shells of patterned fabric are also appliqued to the center of the back.

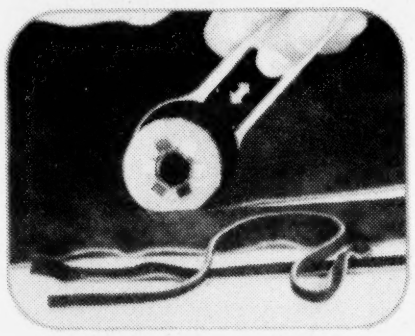
Olfa Rotary Cutter

The finest invention for sewing since the needle. The razor-sharp rotary knife cuts through fabric so easily and precisely that you can cut several layers of cloth at a time. It makes cutting pieces for patchwork a quick, rather than endless, task. The replaceable blade adjusts for shallow or deep cuts. They also sell a roll-up cutting mat which I recommend you buy to provide a smooth, tough cutting surface and to protect table tops. The larger size mat (24" x 36") is worth the extra money. —Marilyn Green

Olfa Rotary Cutter
$6.95 (standard)
$3.29 Replacement blades (2)
$9.49 (heavy duty)
$3.29 Replacement blade (1)

Olfa Cutting Mats
$6.95 6" x 18"
$14.50 18" x 24"
$28.95 24" x 36"
Postage payable upon delivery
All from:
YLI Corporation
742 Genevieve
Suite L
Solana Beach, CA 92075

Or check your sewing supply center.



—Olfa Heavy Duty Cutter

Native American Crafts Source Directory

In an effort to promote and preserve traditional art forms, the Indian Arts and Crafts Board of the United States Department of the Interior has published a directory of Native American owned and operated businesses which sell arts and crafts. The majority of the businesses maintain retail shops and some offer mail-order services and catalogs. Listings are alphabetical by state.

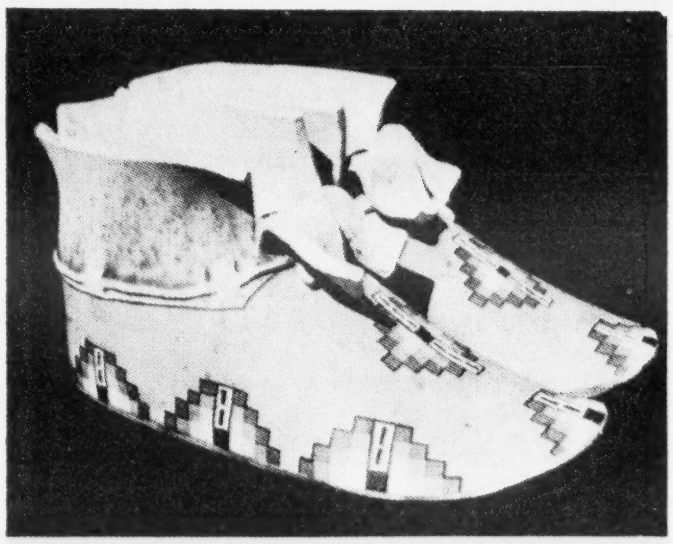
—Marilyn Green

→
Red Earth Studio, P.O. Box 1181, Corrales, NM 87048; (5 Mercado de Maya, on North Corrales Road, off 1-40W and Coors Road North): by appointment only; Tel. (505) 898-1738; O/M: Karita Coffey (Comanche); craftswoman.

Products: Contemporary Native American clay works such as masks, shields, Plains Indian moccasins and leggings, and pots, all hand built of earthenware clays and fired in a modified raku process. Special orders accepted, 20% deposit before starting order. Mail order/send stamped self-addressed business-size envelope for price list.

Native American Owned and Operated Arts and Crafts Businesses Source Directory
1982; 31 pp.

free from:
Indian Arts and Crafts Board
Room 4004
U.S. Department of the Interior
Washington, DC 20240



The "Party Line"

(An Experiment in Public-Access Ad Hoc Teleconferencing)

by Avery Johnson *Illustrated by Phil Frank*

YOU PICK UP THE phone and dial a local number. It rings once and then is answered automatically with a message like: "Welcome to the Party Line. When this message finishes, your call will be added to a conversation which is already in progress. This number does not accept collect calls. You are welcome here." And, plink! there you are in the middle of a conversation.

The experience may seem strange at first, but you know there is no risk because although the others heard the "beep" that entered with your line, they have no way of knowing who you are or if you are even still there. And you also know that you always have the option of just hanging up at any time. So, you stay and listen.

If you call before school or from after school into early evening, you will hear kids dominating the line with their high energy: "Hey, what's happening? . . . Not much, who's that?" Late at night and especially in the wee hours there's a more mature, laid-back exchange which can even focus on a topic as the participants discuss and argue issues. These are people home from late-shift work, old people who can't sleep – or don't want to sleep in favor of this new way to combat loneliness – and other night owls who like a chance to talk. Morning finds a bunch of housewives and kids who stayed home from school chatting, exchanging recipes, arranging for rides and swapping advice. They find the Party Line a welcome change from daytime television and a new form of socializing.

Is this a fantasy? No, it happened, day after day, in Nashua, New Hampshire, during early 1980.

Small World Exchange, Inc., started off as a plan for a broad, computer-based regional information service. We anticipated having subscribers and the public at large call in to our operator at a data terminal to ask where to buy local farm produce, what nearby handyman could repair a leaky roof, which doctor's office is open this weekend, who is offering a ride to Boston, what's at the movies within a half-hour drive. In short we would have one operator in command of a marketing service that would be skills bank, Yellow Pages, classifieds, transport pool, and more all rolled into one.

In late 1977, while we were exploring design and marketing possibilities, an old friend asked: "What are you going to do if you are successful and have telephone callers in queue waiting for attention from your operator? Will you place them on hold?" Well, no, I don't like being left on hold myself. I would at least like to be able to talk to other people who are on hold to find out how many there are and how long they have been waiting. So, we started thinking about a system that would answer calls automatically and allow callers to talk to each other. There appeared to be many advantages for all of us to this pooling of caller interest and information.

In 1978, when we thought we had a business plan formal enough to go looking for venture capital, we were encouraged to separate the information service from the proposed conferencing gadget and prove out the latter first. At that time teleconferencing was still a relatively young market, but we did not yet intend to enter that competitive arena. So, with fewer delays and hurdles than usual for new technologies, the Uni-Linx (TM) Telephone Conferencing System came into being.

We started operations on July 2, 1979. Marketing the service, or even finding enough users to run a full-scale test, was a slow and frustrating experience. Everybody seems to know what conferencing is and that it's a good

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Avery Johnson first wrote us in 1980, suggesting his Party Line machine for ***Next Whole Earth Catalog*** *review – a $20,000 device for connecting together everyone who called a certain number and making them into a community. His device seemed too pricey and unproven to review then, but the image of the Party Line stayed in my mind, and when he eventually sent this article about the dream instead of the machine, we were ready. The Party Line is still for sale for $20,000 to $100,000 from Avery at Armory Road, Milford, NH 03055. There's a small system running privately in New York City. Be the first in your town to melt together the phone lines.* *–Art Kleiner*

thing, but until you are able to show them how it will save them money, it's just an interesting bauble and not a part of their regular telephone use. The Uni-Linx System can handle 50 active lines simultaneously, but we leased only 20 lines from New England Telephone as a start. The system displays the status of all lines to the operator on a CRT screen and, sitting there as operator day after day, I longed to see that screen really light up. How could I get 20 people to want to use the system all at the same time and for a sustained period?

In August we hit upon a stroke of luck. A woman broadcasting a daily midday talk show at a local radio station was willing to try us, and "Open Forum" became a once-a-week event. Some surprisingly good discussions arose, but only sporadically. Noon is not a good hour for a call-in talk show and the topics had to be fairly controversial – Iran, abortion, teen problems or complaints about the schools – in order to draw a good number of simultaneous callers. Generally no more than six or seven lines were connected.

Then, on the afternoon of November 9, a call came in while I was at the console. It was a high-school boy who asked: "What is this?" Maybe he'd heard our number on the talk show. I explained the system to him and suggested that he use it with some of his friends. I didn't tell him where our office was located but asked instead that he think of us as being inside his telephone. It was a Friday and I promised to leave the system up and running in its automatic mode. He and his friends had only to call that same number at any time and up to 20 of them could all talk together. He was incredulous but said he'd give it a try. "The Party Line" was born.

The use of the system started calmly enough for the first few days, but a week and a half later I sat down as operator to prepare for a new radio talk-show customer and was appalled to find that I could not get control of the system. I pushed "Boot" again and again (a program reset command which also hangs up all lines) only to see a new wave of calls fill up the machine like the tide. I was the sorcerer's apprentice who now had too much of what he had once wanted. I struggled and cajoled and turned off the machine for a few minutes, but by air time only a few lines were clear and I wound up losing my new customer. The experience shook me.

Not long afterward, I discovered some more graceful ways to take control when I wanted it. As the users came to appreciate the new medium, they cooperated sufficiently to leave the system alone at times critical for me. If the annunciator message said that the Party Line was not in session, but gave a target time when it would again be available, most of them would wait. I have a notation in my log from an evening soon thereafter when I sat with a friend listening and watching the activity on the CRT. It was amazing. A line would disconnect and in two to five seconds it would be full again! Since it takes longer than that to dial the number, hang up, and redial, we could only assume that there were kids out there having to try over and over again to get in.

The pandemonium which was generally exploding in that "conversation space" is hard to imagine and was difficult to decipher at first hearing. Too often someone would get frustrated or cantankerous and would lean on a touch-tone button so that everyone else would yell angrily for the noise to stop (which was, of course, the preferred response). Only with an operator present were we able to isolate or disconnect such vandals, and when the task of getting in was difficult enough, the threat of disconnection was sufficient to quell most abuses.

I asked New England Telephone for a "Busy Line Study" and it was conducted during the first week of the new year, 1980. Keep in mind that a busy signal was only put out when all 20 lines were active and a 21st call tried to enter. Results were totalled hourly from 8 a.m. until 9 p.m. There were a few zeros in the early morning, but none thereafter. During the busiest hours, 3 to 4 p.m. and 7 to 8 p.m., there were almost 3000 busy signals put out for us. That's almost one per second! Some kids claimed to have dialed for more than an hour before connecting successfully. Eventually one of them tried maintaining a marathon talk session with friends calling in on shifts to keep him awake. He is said to have lasted 107 hours, but I doubt the record ever reached the pages of Guinness.

From the start we suggested to the kids that there might be some dangers in giving out real names or telephone numbers on the "Line." Although many were initially reluctant to surrender their accustomed identities, they soon found that there were unexpected advantages in choosing a nickname – sort of like a CB

handle – for a public self-image. The range of these nicknames was wonderful: Almond Joy, Black Knight, Cougar, Danger Zone, Freebird, Granny, Hot Legs, Lonesome, LSD, Moon Unit, Purple Haze, Scissors, Stoned, Sweet Honesty, Unknown, The Witch. I was Waterboy.

A cooperative and interested businessman in a neighboring building donated some time on a word processor for me to keep a list of nicknames, updated every few days, when we began to solicit token subscription fees. There were other enthusiastic users who kept lists of names and the numbers eventually headed toward 2000 "regulars" but there were some that only appeared for a short time and never again. Some people used it very much and some not at all, but the circle of users never stopped widening.

We sought to prohibit dope deals because we didn't want the law on our backs. I tried not to impose my own values onto events on the Line and would only pull someone aside when I was operator if there were active objections to his or her behavior by the other users. Often the language was abominable and I occasionally heard protests from parents about the abusive profanity available to their little dears. (I pointed out that we were not a broadcast medium: one had to dial in to reach us.) The question often arose as to whether the Nashua police were monitoring the Line. My answer was that since this was a public communication space – with free access to all, including the police – it would not be like wiretapping and we might as well assume they were listening: i.e., so what?

I was amazed to find that sometimes there might be three conversations maintained simultaneously without apparent interference. Mostly, though, there weren't any formal "conversations" in the sense of there being a sustained topic or agenda. It was a melting pot of salutations and epithets and questions requesting only brief answers: "Who's that? Hey, how ya doin'? How old are you? Are you good looking?" For a time there emerged a rollcall procedure (later bastardized to "road call") in which everything was expected to come to a halt and the various participants would chime in as sequentially as possible with nickname and age. I knew, as operator watching the CRT, that only a fraction of those connected indicated their presence at these times.

Early on I found myself pressured by some of the kids to let one or more of them come in and be operators. It was something of a power trip to take control of the Party Line, but I was able to find a few who were trustworthy and reliable. Part of their wish to be operators came from a genuine enthusiasm for the thing and a desire to zap the "pushbuttons" and the "loud stereos" who would try to disrupt the Line out of frustration or anger or whatever. I wanted to leave the Line unattended as much as possible, but we discovered there were creeps mean enough to leave a touch-tone key depressed for hours.

The operator's CRT screen indicated with a flashing asterisk which line was delivering sound at any given moment. Accumulated connect time and "talking time" were also displayed. As a result, the operator could tell at a glance who had been on for how long and which lines contained the "listen-only" types. There were almost always a few of these and often if such people were isolated and addressed directly, they would simply hang up without responding. At the other extreme there were, of course, those who tended to dominate conversations, and I realized that in this totally auditory medium a "critical mass" of these garrulous types were necessary in order to keep the talk moving.

Apart from the Uni-Linx "main pool" into which calls are placed automatically after receiving the annunciator message, there are six other groupings that can be formed, isolated from all the rest. All of this happens at the touch of a few keys on the CRT keyboard. I often picture it as a public building where anyone can enter into the front vestibule space and talk to whoever is

there. If a receptionist (operator) is present s/he can assign people to six private rooms down the hall and then bring them back later to the main pool.

The kids on the Party Line seemed to have ambivalent feelings about the "private lines," as they called them. Sometimes two or three or more would want to go off for a while to talk just among themselves, but they always wanted to make sure they could get back later into the maelstrom of the moment. As with all kids who "hang out"

somewhere, they wanted to stay on the boundary between the "indoors" and the "outdoors" of where things were happening.

I can remember being charmed the first few times I helped a couple who didn't know each other yet but wanted to talk privately. The moment they reached out within the private space and no longer had to cope with the myriad other relationships in the main pool, their voices softened audibly and their tempo slowed to a comfortable cadence. If two people monopolized a private line for too long, we would ask them please to hang up and call each other directly. Almost invariably, they would opt instead to be returned to the main pool.

There were also times when I was able to take the lines over which two people were yelling at each other angrily and place them together in a private connection so quickly that they didn't miss a beat of the argument nor notice at first that the rest of the crowd wasn't with them any more. Often the loss of their audience would suffice to obviate the disagreement and they would laugh (perhaps throw in a curse at me for good measure) and fall to friendly commiseration while waiting to be returned to the chaos they loved.

I have a fantasy of a future system which includes an algorithm* in its computer that can watch for simple cyclical patterns in small groups of lines. Thus, if a group wanted to achieve some measure of privacy they would simply commence a chanting round of counting (1, 2, 3, . . .) and when the algorithm had a fix on that cycle it would start slowly to diminish the sounds of the rest of the pack as heard by that group and of their sounds for the pack so that the effect would be as if they had moved off slowly as far as desired. Stopping the count and resuming normal conversation would hold the relationship fixed, while return to the main group would be achieved simply by maintaining silence for a time longer than is normal in active conversations. One could still retain some audible grasp of any abrupt happenings or anticipated arrivals in the main group while also enjoying a measure of privacy with a friend. The heuristics of such an algorithm might be difficult to perfect, but I think not.

(*This word used to be *algorism* but was bastardized by semi-illiterate computer hackers who thought it sounded kinda like *logarithm*. –Avery Johnson.)

A lot of what was exchanged on the Party Line was just stuff of the moment; people calling in to "be there" where it was all happening. Some news was swapped and the overall effect was like the old town well, where people had to come once or twice a day to fill their buckets and where they would talk with whoever else was on the same errand.

But there were some events that never would have come to pass in any other way. I heard attempted seductions of young girls by older men but never knew if these went any further than just talk; and there were some serious fight challenges and reports later on the outcomes. Would the fights have happened anyway? Perhaps. But it was the positive connections that tempted me into keeping the Line going well beyond the point when warning signs were saying otherwise.

"Mustang" was a kid who was being abused by her stepfather and she stayed out of school for weeks at a time, preferring instead to sit in a hot bath at home and talk on the Party Line. She wasn't much of a complainer, but gradually her story came out. A family with four daughters in a neighboring town took an interest and soon adopted her themselves, giving her a new home.

Then there was "Rejection." He attempted suicide in the spring and wound up in the hospital, but from that bed he was able to keep in touch with the Party Line and then he began to find out how many friends he had. He even changed his nickname later.

"Blue Eyes" was one of our teenage operators for a while but her subterranean anger got in her way too often and we ultimately asked her to give back her office keys. One day, though, she was on the Line from home and was obviously hurting. Her mother worked at an emergency ward many towns away but Blue Eyes didn't want any part of that. We finally talked her into accepting a ride from "Paul Bunyan" to a local E.W. to have her pain checked out. The diagnosis was an infected kidney!

One of our adult women regulars found herself stranded late at a night spot and didn't trust anyone there to drive her home. She called the Party Line, found a familiar voice, and got her ride.

"Queen Elizabeth" and her husband, "Billy the Kid," were elderly people housebound by failing health who came to rely on the Line as an all-night recreation and a source of good talk and fellowship. A few others worked late-shift jobs and had always dreaded the after-work hours when no one else is up and

around and nothing much is open.

We would like sometime to set up a regular morning check-in service for senior citizens with one of their number in place as operator. We are aware of the growing number of such services that have sprung up around the country where the clients report in every morning to say they're okay and then, if the roster is incomplete at some hour, a check is made on the missing names. In other places the agency involved calls out to the clients one at a time. With both methods there is no time for chatting because the line must be cleared for the next call. What if that is the only human contact all day for that particular person? If a conferencing device were used, many of the callers could stay on after checking in and talk to their friends – perhaps about what to do together on a nice day.

Loneliness is something that grows and deepens in the moments when we want human contact but cannot have it. If you have a telephone, there may be no one to call, perhaps because of the hour or because all the numbers you have tried come up empty. If the Party Line is there, loneliness can often be short-circuited indefinitely. The medium is alive, responsive, and of high variety. It creates its own community.

We suspect also that counseling for some forms of human distress such as wife- or child-beating can be initiated more effectively in a telephone conferencing environment. Being able to call in anonymously to a place where others are talking who have already shared your experience and remorse affords a giant step toward feeling less unique and irredeemable.

In the arena of commercial voice-only telephone conferencing for business and industry, the going rate for just the interconnection service has been around 35 cents per line per minute, with the customer(s) picking up any toll charges for their calls in to the conferencing bridge. But what of an open-ended, ad hoc call-in free-for-all? How can such a public-access communications

medium earn enough from somewhere to sustain itself?

Early in the game we began asking the kids to pay us a buck a month as a subscription fee. It was a rounded, token amount that would test our market response. We rented a P.O. box for the Party Line and asked that they each send a dollar along with a nickname and we would keep the list up to date and know who was paid up until when. The generous contribution of word-processor time aided us with this task.

Some of the kids were fanatical about paying and some helped further by talking up the need for revenue on the Line itself, patiently giving out the box number and zip code for us. Along with the dollars that did reach us we received piles of unsolicited testimonials lauding the Line as the best thing happening around Nashua, N.H. But our paid-up subscribers numbered about one in ten of the total number of users, just about the same success enjoyed by educational television. Of course, we did have the option, with an operator on duty, of cutting off anyone who was not paid up, or of not letting him or her into the "room down the hall" where the Party Line was happening that day. I occasionally tried such methods of applying pressure, but I didn't like the feeling I took home with me. I was also aware of the chilling effect of an interception on a new caller who was trying it for the first time.

The most adequate and direct solution would have emerged out of cooperation from the New EnglandTelephone Company. Suppose they were to create for us a "local toll exchange" and then were to pass on to us as a royalty some of the revenues derived from it. Their record-keeping is computerized anyway and the subroutines necessary to keep track of our activity would in no way alter their basic procedures. Long-distance rates are traditionally calculated as a product of time and distance, so why not picture the Party Line as residing on top of a tall flagpole in the middle of Nashua? I suggested that we define a call-in unit as 20 cents and that Small World guarantee a base of 10,000 such units per month or $100 per line, whether or not we generated that much activity. (We estimated we could exceed the minimum within the first three days of the month.) After those first guaranteed units we wanted a 50 percent royalty on all further traffic. Furthermore, the accounting of our share would be only on the *number* of calls in to us – irrespective of any other tolls they might be generating by distance of origin or duration of connection.

We could have guaranteed generous revenues both for us and for them. We were refused. New England Telephone said they had never served in the role of billing agent for anyone else and did not intend to start. They expressed concern over opening the door to similar demands from other vendors such as data services and reservation booking agencies which generate toll revenues without expectation of a royalty. I pointed out that we were offering nothing to our clients other than an interconnection between them. Unlike the other vendors they worried about, for whom customer identification had to be the first step in their process, anonymity was of high value to our users. Furthermore, it is unlikely that unit accounting by *number* of calls would have interested the other vendors. I thought that we could differentiate our service sufficiently to warrant granting us the request, but my arguments fell upon deaf ears.

Curiously, there was a meeting called by Ma Bell in our offices to discuss our impact upon the Nashua area telephone system. It seems that we had, by early March of 1980, increased the number of attempted calls, or

"dialouts," by 18 percent. They were troubled by the trend and indicated that we might be asked to lease more lines, presumably so that the repeat-busy dialings would decrease in frequency. I guessed that the actual effect on dialouts would be like throwing gasoline on a fire. As events turned out, the point was superfluous. It was also revealed at that meeting that because of the kids' eager exploratory efforts to reach the Party Line when all lines were full, a number of telephone customers had had to request that their numbers be changed in order not to be harrassed around the clock by misdialings. I had heard a few such complaints in the first weeks, but no one had until then told me how far the problem had gone.

What to do next? We had a proven piece of equipment that anyone could operate and a proven market that had spread of its own without advertising. In less than four months we had more than 2000 daily users in a local dialing area of 150,000 – but we had no reliable way to collect a fee directly. We might have to look for sponsors who would buy our annunciator message time and perhaps other intervals of interruption to expose our captive audience to commercials. We have all become conditioned to tolerate such intrusions but I didn't want to impose them on the Line.

By April it was apparent that some of my volunteer operators, especially the ones who wanted the graveyard shift, were not really operating in the best interests of the Party Line but had some agendae of their own. Drug deals and other solicitations can set up dangerous liaisons because of their illegality quite apart from whether drugs for consenting adults are themselves dangerous. I got wind of some mortal threats (not threats to me, but ones that would probably not have arisen without the line having been there), and there was word also of some parents becoming upset by the language their kids could hear. Revenues from the $1 contributions were running less than $400 per month.

There were days when I spent hours as operator, dumping off the "pushbuttons" and "loud stereos," talking quietly with those who really wanted the Line to continue but didn't know how to help me and telling all the kids that the revenues had to come in or the Line would go off.

On the evening of Friday, April 18, 1980, I came into the office after a warning of chronic gross violations of my request for at most two operators (and no one else) to be there at one time. (I had security obligations to the offices around mine in that building.) That night I found an office carpeted wall-to-wall with Nashua's teenagers. I decided, to quote Muad'Dib, "It's finished because I end it here." The struggle had gone past my limits of tolerance and I pulled the plug, literally.

The next day I set up the system with four lines receiving calls and putting out an annunciator message, but no conferencing connection between them. The message said that the Party was over and that those paid up in advance could get their money back. I had no takers.

The flood of calls did not subside immediately but tailed off slowly for the next weeks and months. Even now, more than two years later, there is still the occasional wistful call that will come in when I am running a conference for a commercial customer. Some may be wrong numbers, because they hang up during the message, but some are kids who talk for a moment, hoping that the Party Line might somehow come back: Teenage Camelot.

Well, I would like to bring it back and in almost as free-swinging a mode as it was then. I'd like to be able to pay operators a sensible wage so that I could hire people for the job who could handle its pressures as well as its joys. Some bizarre things can happen and there are crazy-making callers who can anger anyone. I would want people who are flexible enough to come up with a response appropriate for themselves to any situation. That's a tall order. There are all sorts of people out there, even skilled conciliators who can talk the angry disruptors out of their need to get in the way. There are desperate people who suddenly find out that there are others who care and that their troubles are not unique nor insoluble. And there is always the boisterous, marvelous talk of people who for once have an audience.

The Party Line was turned on around-the-clock for just over five months. It is something of a legend around Nashua and occasionally I will run into someone who used it or whose kids used it. I am offered as many descriptions of what the Party Line was all about as the blind men gave of the elephant.

It was whatever you made of it.▪

Good Books

No getting around the comparison — there are more intriguing new reading possibilities here than I've found anywhere outside the **Whole Earth Catalogs,** *with refreshingly little overlap.*

Want "at least five (preferably twenty-five)" good books pertaining to The Moon, Tropical Africa, Cape Cod, Ponds, Bears, Gypsies, Uncles, Anarchism, Baseball, Violinists, or the Nature of Time?

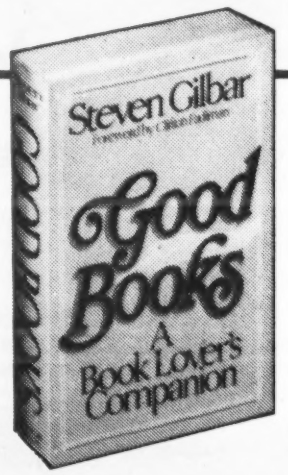
Steven Gilbar's wide-ranging good taste, consistently evocative mini-revews and creative format should keep the average bibliomaniac busy for years. Of immediate interest to me is the wealth of good novels set in particular regions, but you'll also find "memoirs, studies, essays, biographies, picture books, thrillers, how-to books," and more.

Since mail-order availability isn't among Mr. Gilbar's criteria, he includes many old and out-of-print gems. Finding them may require some psychic aerobics in libraries and bookstores, a challenge that Clifton Fadiman addresses in his eloquent foreword. [See also his classic introduction to "the classics," **The Lifetime Reading Plan,** **NWEC** *p. 574.]*

Best of all is what you won't find here: "I just don't like inaccessible, ponderous, pompous, or boring books." Amen. Choose from these 9000 titles instead.

—Ben Campbell

Good Books
Steven Gilbar
1982; 409 pp.
$10.95 postpaid from:
Houghton Mifflin Co.
Attn.: Mail Order
Wayside Road
Burlington, MA 01803
or Whole Earth
Bookstore



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Ponds

Amos, William. H., *The Life of the Pond* (1967). A marine biologist's guided tour of the myriad life forms coexisting in a pond.

Reynolds, Christopher, *The Pond on My Windowsill* (1970). How to build your own "pond" of water insects, snails, worms, and other organisms without a trip to the pet shop, by collecting specimens at your local pond. Great project for kids.

Russell, Franklin, *Watchers at the Pond* (1961). The teeming universe of a pond in the Canadian wilderness over the course of a year. A fresh, skillful story by a naturalist.

Thoreau, Henry David, *Walden* (1854). "When I wrote [*Walden*] I lived alone, in the woods, a mile from any neighbor, in a house which I had built myself, on the shore of Walden Pond, in Concord, Massachusetts, and earned my living by the labor of my hands only. I lived there two years and two months. At present I am a sojourner in civilized life again." So begins one of the most remarkable books ever written about nature and the meaning of life.

Tresselt, Alvin, *The Beaver Pond* (1976). The beautiful illustrations by Roger Duvoisin make this little book for youngsters very special.

Free Spirits

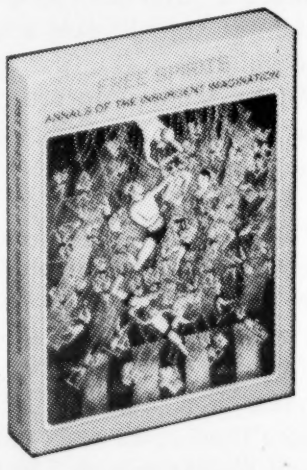
The difficulty I have in describing this book(?) is a clue to its significance. **Free Spirits** *is almost, but not quite: a political journal, a literary magazine, a pop culture anthology, and a surrealist manifesto. The world has seen more than enough of all the preceding; what makes this anthology work is the fact that its juxtaposition of disparate elements delivers an impact greater than the sum of the parts.*

While the still-extant Surrealist Movement's other publications have all suffered from a propensity to lay it on a bit thick with the embalming fluid, quotes from Trotsky, and eight-point type, **Free Spirits** *— whose editors are all Surrealists or allies — truly lives up to its name, sharing a delight in wide-ranging artistic expressions of human freedom, many of which have little or no relation to Surrealism itself. Pueblo kachinas, Spike Jones, the Seattle General Strike of 1919, and a lengthy interview with filmmaker Pat Ferrero (***Quilts in Women's Lives***) are only four out of dozens of subjects in the book's 223 pages. In range and design,* **Free Spirits** *reminds me of* **CQ** *(minus* **CQ***'s biological/scientific underpinnings).*

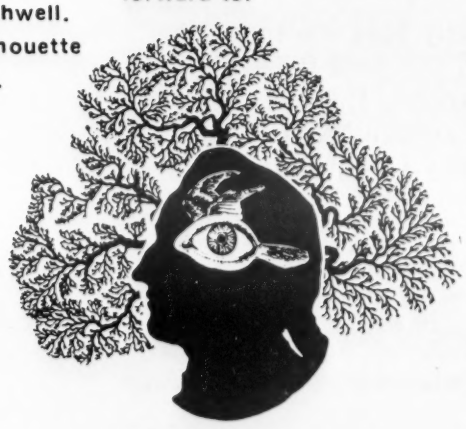
This is reportedly the first of a series of annually issued **Free Spirits.** *If so, we've got a good deal to look forward to.*

—Jay Kinney

Free Spirits
(Annals of the
Insurgent Imagination)
Paul Buhle, Jayne Cortez,
Philip Lamantia, Nancy
J. Peters, Franklin and
Penelope Rosemont,
Editors
1982; 223 pp.
$8.75 postpaid from:
City Lights Books
261 Columbus Avenue
San Francisco, CA 94133
or Whole Earth
Bookstore



Brook Rothwell.
Krilian Silhouette
of Goethe.



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Strangely disquieting in their utter detachment, their total gratuitousness, palindromes forbid access to all forms of interpretation. —Franklin Rosemont

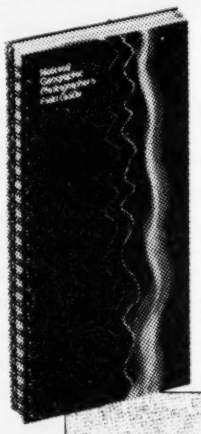
Rats live on no evil star

Rail at a liar.
Name no one man.

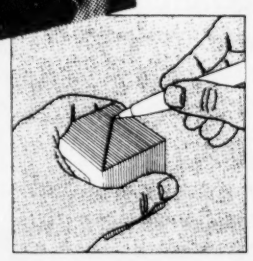
Snug & raw was I ere I saw war & guns.
No lemons, no melon.
Stiff, O dairy-man, in a myriad of fits.
Too far, Edna, we wander afoot.
Draw pupil's lip upward.
Emil asleep, Hannah peels a lime.
I roamed under it as a tired, nude Maori.
No sot nor Ottawa law at Toronto, son.
Desserts I desire not, so long no lost one rise distressed.
Paget saw an Irish tooth, Sir, in a waste gap.
Trash? Even interpret Nineveh's art.
Dog as a devil deified lived as a god.
Step, Syrian, I start at rats in airy spots!
No, it is opposed; art sees trade's opposition.
Eureka! till I pull up ill I take rue.
Wonders in Italy: Latin is "red" now.
Straw? No, too stupid a fad. I put soot on warts.
'Tis Ivan, on a visit.
Egad! A base tone denotes a bad age.
Marge lets Norah see Sharon's telegram.
Eva, can I stab bats in a cave?
No mists reign at Tangier, St. Simon!
Deer flee freedom in Oregon? No, Geronimo, deer
feel freed.
"Do nine men interpret?" "Nine men," I nod.

National Geographic Photographer's Field Guide

Short of the splendidly comprehensive **Photographer's Handbook** *(18 bucks, 352 pages,* **NWEC** *p. 485), this is the introductory photography book of choice. It has the most realistic sense of audience I've seen in any such book — you're messing around with a camera, right? and you want some memories worth showing to friends. Good basics, good organization, good range, very good tips (when not to trust your light meter, how to keep your slide show in order). This is an intelligent little book. —Stewart Brand*



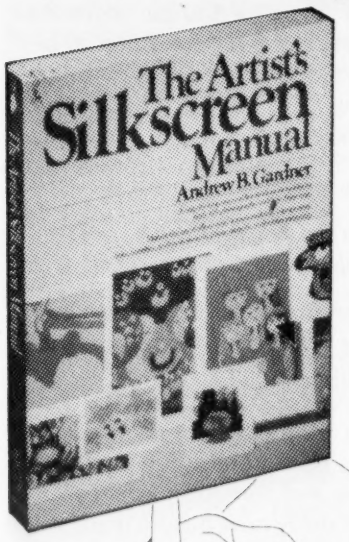
National Geographic Photographer's Field Guide
Albert Moldvay
1981; 120 pp.
$4.95 postpaid from:
The National Geographic Society
1145 17th Street NW
Washington, DC 20036



To keep your slides right side up and in order for projection, get them all oriented properly, then draw a heavy diagonal line along the stack, on the side that goes up in the projector (upside down on the slide). If a slide is turned over or out of order, you'll see a break in the line.

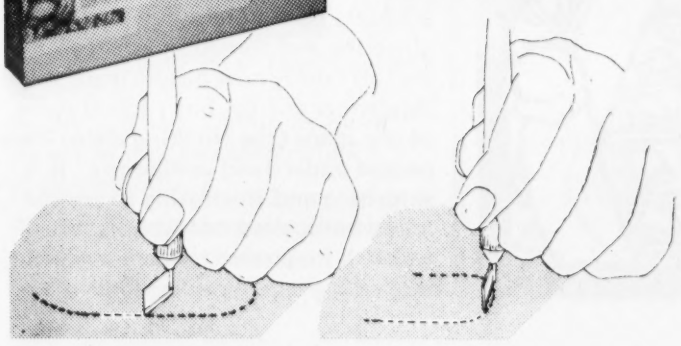
The Artist's Silkscreen Manual

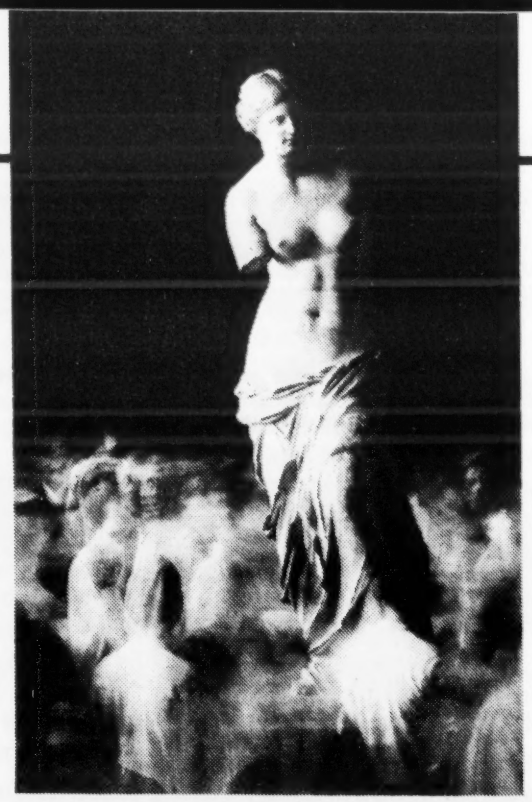
With clear line drawings and numerous photos, Mr. Gardner leads the reader step by step from selecting materials and assembling the frame, through stretching and preparing the screen, to choosing a squeegee and deciding upon the method for creating the stencil. There is a complete description of possible inks and chemicals involved and the use of same. Knife-cut stencils and photo stencil techniques are thoroughly explained with ample illustrations and an invaluable troubleshooting guide. Likewise for printing plus a glossary of terms and index. This is the only book on silkscreening that has taught me more than I picked up in a five-day workshop. —Susan Edwards
[Suggested by Sheldon D. Drake]



The Artist's Silkscreen Manual
Andrew B. Gardner
1976; 192 pp.
$5.95 postpaid from:
Grosset and Dunlap
51 Madison Avenue
New York, NY 10010
or Whole Earth Bookstore

Use of the swivel knife, showing how the blade rotates as the hand changes direction.

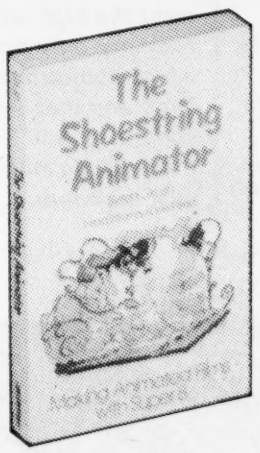




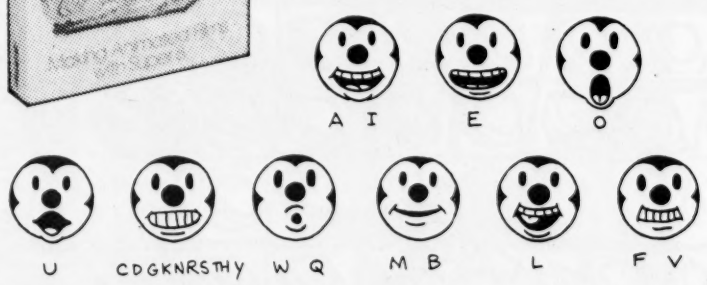
A tripod, existing light, and a long exposure combine to contrast the eternal beauty of "Venus de Milo" with the restless motion of her visitors. With a still longer exposure — five seconds or more — you can eliminate the art lovers almost entirely, if they don't stand still long enough to register on the film. Experiment with slow shutter speeds and slow film.

The Shoestring Animator

A truly complete beginner's guide to making animated films with super eight, **The Shoestring Animator** *by Byron Grush will tell you everything a good book on 16mm will and more. Besides learning the basic theories of what makes animation work visually, you will be taken from a history lesson to many valuable techniques used in producing a finished film. —Donna M. Mankus*



The Shoestring Animator
Byron Grush
1981; 171 pp.
$6.95 postpaid from:
Contemporary Books
180 North Michigan Ave.
Chicago, IL 60601



Based on movements found in Preston Blair's book Animation.

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Exactly how does the character move? How is its body weight distributed? How does gravity affect it? Consider the "Dance of the Hours" sequence in Disney's **Fantasia**, designed by Preston Blair. The elephants have believable mass. Their bodies bulge and roll and move almost naturally within the space they occupy. They have no weight, however, so when a strong wind comes along they are blown away like so many soap bubbles. These buoyant elephants come close to bridging the gap between character animation and naturalistic animation, but humor intrudes. The humor is based on the transgression of natural laws, so we are left with graceful comic fantasy and the hint that character animation can approach naturalism without the loss of magic.

Computers and Fish Heads

Drawings by Ric Haynes

*Ken Crossen's critique of our computer coverage, "Whole Earth Suckered by Personal Computer Hype" (***CQ** *Spring '81), provoked a swarm of replies, both indignant and approving. (The article's provocative title was ours, not his.) By asking whether small computers could really compete with larger computers in regular business use, we discovered we had accidentally tapped into one of the most feverish ongoing debates in the industry. It's not merely a two-sided debate; every letter we received contained cogent advice for the computer buyer, all based on experience, all well-reasoned, all disagreeing.*

Most letters brought up the question of whether small computers should be valued more as personal or business machines. Around here we've accentuated the personal, partly because business computing is such a diverse and contradictory industry right now, difficult to find reliable guides to except on a local, one-job-at-a-time basis. But there are other reasons. Stewart Brand recently said computing is replacing jogging as a benign addiction: "The people who used to get up at five in the morning to run are now getting up at five to work at their terminals." Software reviewer Bob Purser of **Purser's Magazine** *(***NWEC** *p. 531) advises would-be small business-computer owners to buy an Apple first, experiment, get themselves and their kids hooked, and then depend on their kids' expertise to help them set up a business system. For my part, I think people are drawn to computers as their business and personal lives overlap. People want the high level of organization, formerly only possible in business, which computers bring to personal lives; and they see that learning about computing will help them find lucrative work in an otherwise bust economy.*

An Ancestor Visits

Here then, for you potential ex-jogging job-hunting kid-hiring addicts, are some sections of replies to Ken Crossen, with Ken's reply to the replies at the end. Since they're nigh-impossible to illustrate directly, we're running them with some drawings by cartoonist Ric Haynes. These "fish-head cartoons," as they're known in the office, speak with the same confused dreaminess that must envelop every novice shopping for a computer. —*Art Kleiner*

I've been thinking about Ken Crossen's article in the spring '82 issue dealing with "personal computer hype." His own "hype" about the 16- and soon-to-be-announced 32-bit microcomputers gets to me. At $7000 to $20,000, they must be good, but for *whom*?

Not for the person who wants to play Star Trek or Adventure. *Not* for the 14-year-old who's learning PASCAL on his parents' Apple II. *Not* for the person who's intrigued by computers but only wants a system to experiment with.

The DEC LSI-11 is good for business, but I wouldn't want to buy one just to hook into *The Source*. After demolishing the 8-bit computer as a passing fad, all I see Crossen doing is extolling DEC. Great — except not everybody *needs* one. Dave Meile
Minneapolis, Minnesota

Like Ken Crossen, I felt frustrated with the Whole Earth coverage of computing, which was atypically superficial for **CQ** and **NWEC**. I am an anthropologist with an undergraduate background in electrical engineering and computer science. In my job I study how people understand residential energy, but I spend some of my spare time thinking about how people understand computers. It is surprising and frustrating to see the micro enthusiasts re-inventing the wheel — they seem to have no contact with the two generations of ex-

perience which I always took for granted (from computer classes and books). As a result, the quality of some of the software is embarrassing. Obvious bugs. Inconveniences that no user should have to put up with. But I don't see what can be done about it. With the expected software crunch, thus more demand for "any program that works," things will get worse before they get better. I pray that some day the craftsmen will emerge from the hackers.

Willett Kempton
East Lansing, Michigan

. . . . The advertising hype for the "consumer" micros (Apple, Radio Shack, Atari, Texas Instruments, Commodore) is very misleading, but these machines do have a lot of value for limited purposes. Those purposes are play and education. They are great toys (if you can afford expensive toys) and provide great demystifying experience. One learns how dumb computers are in general and how inadequate the micros' seductive color video is compared to everyday TV images. Some of their makers are really sweating trying to come up with their next generation, which will have to please people who bought the hype the first time around.

I want to tell you from my experience that a real hard-working useful world of mature, affordable computer power is available right now from S-100 bus hardware and the CP/M disk operating system . . . .

The S-100 bus is an ancient (1975) and now venerated scheme for putting together a microcomputer in modular, building-block fashion, with interchangeable blocks. It was a hasty ad-hoc design when it was thought up, but since it provides everything that is needed plus some room to grow, there is no reason to replace it. An S-100 bus computer is built around a "mainframe" box with a heavy power supply and from three to 20-odd "slots," identical connectors into which the installer plugs a set of circuit boards which are the works of the computer . . . .

. . . . What's most important about the S-100 bus is that like a good hi-fi system, it can be upgraded piece by piece and you can mix brands. You can diagnose troubles by substituting known good boards or testing the suspicious boards in another (different brand) computer. I'm pretty much a novice at computer hardware, but I was just able to get a friend's system working again in a couple of evenings by this process. Definitely more advanced than the automobile in repairability.

What makes all the computer components connected through an S-100 bus work together is a program called the "operating system," and the operating system of choice for micros is Control Program/Monitor (CP/M), written by Gary Kildall. Like the S-100 bus, snobs may sneer at it because they would know how to make a better system *if* we were starting over, but we're building on experience, not starting over every year.

CP/M has a section in it that is custom-modified for the particular combination of boards and accessories that you have. This is written by the dealer or a consultant. It needs to be revised when your hardware evolves. Under CP/M, all your old programs will continue to run on your evolving machine, and they will run on anybody else's CP/M machine too, whatever brands of hardware it's made of.

The interchangeability of the all-important programs is such a powerful force that entrepreneurs are doing very well manufacturing add-on kits that enable you to run CP/M on consumer computers. Take an Apple II with disks and add a lowercase keyboard kit, a 24 by 80 screen display kit, a Z-80 processor module, and more memory (altogether around $1500 added to the basic Apple), and it becomes a viable professional business computer. CP/M is available for the new 16-bit IBM micro, and all the Japanese micros run it.

The CP/M world is burgeoning with real artistic competition to create programs for professional and business people that do good work and don't make problems of their own. So far the successful tools developed include word processing (invaluable for writers and communicators), list-keeping programs (great for organizations), and small-business accounting programs. There is a vast library of hundreds of free public-domain CP/M programs. The competitive new programs run from around $200 to over $1000, and some are worth every penny. . . .

. . . . Setting up a capable S-100 CP/M system costs around $8000, including disks, a good printer, and software to make it do something pleasing. Same general range as buying a car. You can pare this down to as little as $3000 by accepting various compromises, such as 5¼-inch disks and a printer that types ugly computer type. With expert guidance, great bargains can be found at computer swap meets. Be aware that almost nobody advertises really complete systems and that an advertised price for a "computer" may be less than 20 percent of the real system cost.

The Fire Hoop Trick

Bartok in Bluejay

The speed and information-storage capacity of this type of system are determined by the floppy-disk drives. It makes little difference whether the CPU is 8 or 16 bits. With floppies one usually changes to another set of disks when changing from one work area to another. The mailing list is on one set, the writing on another, and the accounting on another. This means if you're writing and somebody calls up asking for information in another area it may take you two or three minutes to get to it unless you've prepared printouts for ready reference.

To get lots of information "on line" you need to add a hard-disk memory. Mine (a Morrow M26) costs $3500 for 26 million characters. A hard disk is much faster than the floppies (which you keep for backup and exchange), holds as much stuff as dozens of floppies, and works much faster. Hard disks are hot stuff, so everybody who can is making them, and the prices are coming down steadily.

This kind of investment calls for prudence. Incompetent dealers and consultants are numerous. The best way to get into a computer you can depend on to be part of your work is to hire a consultant whom you trust. Check several references on dealers or consultants you don't know. No kidding, interview their customers. Marketing of micros is immature and chaotic.

Dan Dugan
San Francisco, California

As I read Ken Crossen's article I put question marks in the margin rather often; I thought you'd be interested in where and why. . . .

1. "The pivotal issue in software is errors, and a programming language will either help you make them or help you avoid them . . . . flying into or out of any major airport is literally trusting your life to the absolute reliability of air-traffic-control software. . . . the Ballistic Missile Early Warning System has erroneously put the U.S. military on several well-publicized maximum alerts." (p. 114)

The priority of reliability (and the related quality of maintainability) is clear in the field of *commercial* software. This does not mean it automatically comes first in personal software as well. Consider:

Failure of a personal computer program will not have catastrophic results;

Such programs will more rarely need maintenance by someone other than the author;

Such programs are not often so large or complex that a structured, self-documenting, strongly typed language just has to be used to enable comprehension of them;

The following language features are more important to home computerists than professionals: ease of learning (as opposed to power and clarity once learnt); interactivity (a feature of BASIC, FORTH, and APL, but not PASCAL or PL/I); standardization (most books and articles and available classes are about BASIC); cost (PASCAL and PL/I compilers cost hundreds of dollars; BASIC comes with the machine; FORTH is under $100, usually).

2. ". . . any given technology will be buried alive by new technologies in about five years. Information about 'classic' computers or computing tools in the last years of their life cycle is mere carving on the tombstone." (p. 114)

". . . 8-bit microcomputers (Apple, TRS-80, and so forth) will soon be overrun by 16-bit microhardware." (p. 115)

It is possible to upgrade the Apple to a 16-bit microprocessor, the 8088, by buying a card to place in one of its eight "slots." Some of these cards come with extra on-board RAM to increase the memory available too. (Curious point — Apple's main virtue has been one of omission: its empty spaces, which have allowed adaptations and upgrading.) The TRS-80 Model Two can be upgraded (except for the extra disk drive) to a Model 16, with 68,000 CPU, for about $1500. So I don't think those machines will be buried.

Even for the machines which lack upgrade potential, it's doubtful whether the mere existence of more-bang-for-the-buck at the high end of the computer field will make them obsolete; the precedents in the mainframe and mini markets may not apply, at least not for home (as opposed to "serious" professional) use.

The slow speed of 8-bit machines at number crunching (pp. 115-16) can be fought by getting away from interpretive BASIC, and — on the Apple — getting an add-on board with an arithmetic processor for floating point and double precision numbers.

I'd be surprised if many of your (non-professional) readers had such a heavy number-crunching load that they were seriously inconvenienced by the limitations of an 8-bit machine. The defect of 8-bit machines is their limited (64 K) address space, not their slowness.

3. "Forget canned software and forget the omnipresent 'hand-holding' of the personal computer market. They will only anesthetize your creativity." (p. 119)

Surely he meant "go beyond" rather than "forget"? As written, it implies "don't use," which hardly makes sense. Also, his condemnation of hand-holding seems contradictory to his earlier praise for user friendliness.

Despite these criticisms (which in turn may be open to criticism), I greatly enjoyed his article, and have read it a dozen times, nearly. It's a valid extension (not replacement) of **NWEC**'s coverage for the committed user.

Roger Knights
Seattle, Washington

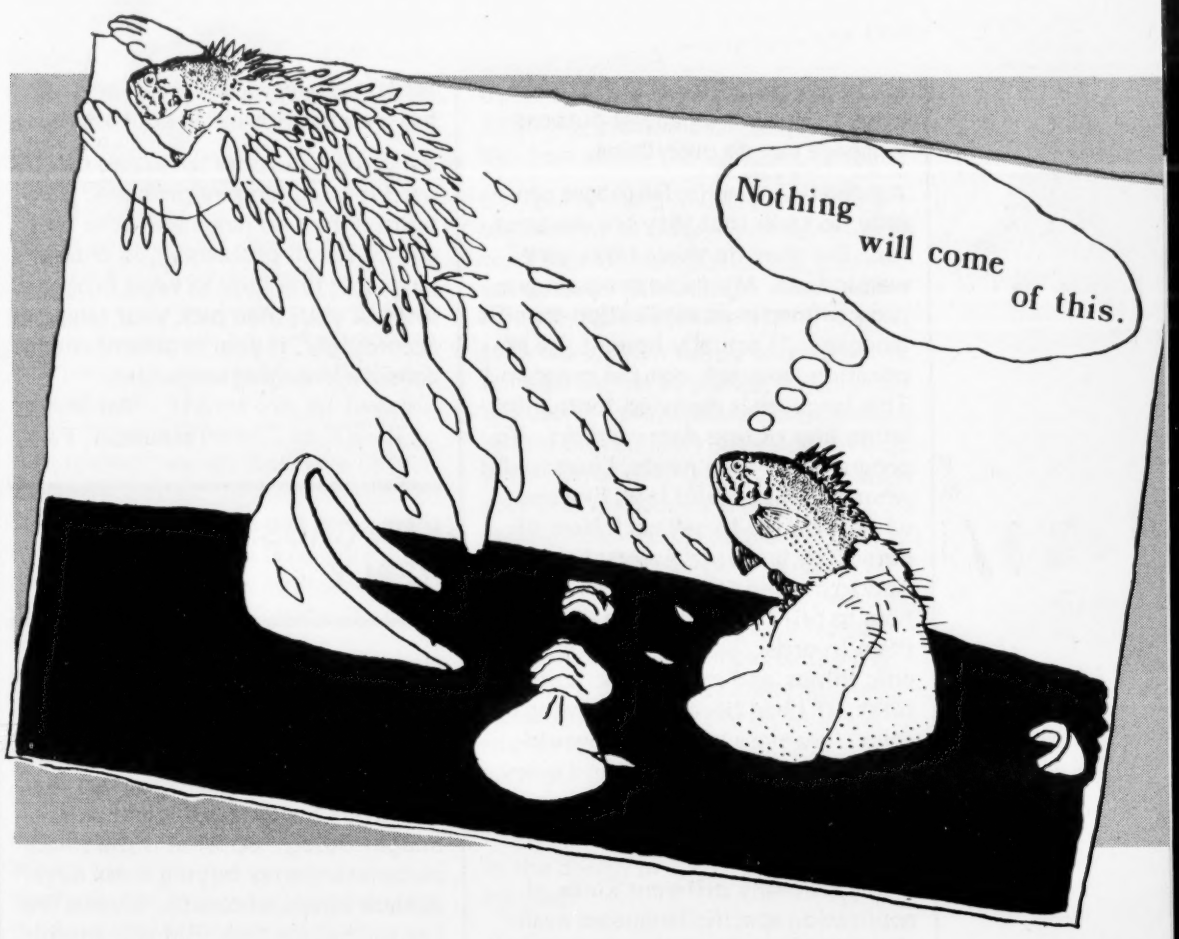
. . . . Computers, properly used, are mind amplifiers. They can help their keeper do things that couldn't be done otherwise. It's more difficult to picture a mind amplifier than to picture, for example, a voice amplifier. Let's look at one example of what I use my computer for: keeping track of people I know.

I can tell my computer: "George, Dave Fogg's number is 288-3502. Ken Knesic's phone number is 654-0759. Ken Knesic is a piano tuner." George will remember all this and everything else I tell him. I can then ask George to list in alphabetical order everyone he knows about. So far, just what a Rolodex does (another example of a mind amplifier). I can also ask George who I know that is a piano tuner. A Rolodex can't do that without having two cards for every piano tuner. Now, I am going on a trip, say to Washington, D.C. I can tell George, "Tell me everyone I know in or near Washington, D.C., and their address and phone number." George can search through his disk files much faster than I can through a Rolodex. True, I could try to remember everyone, but I'm likely to forget someone. George never forgets. I use George to amplify my memory.

Most people don't care how a mind amplifier works. They just want the results. They need a computer. They don't need to program it . . . .

Ken says that in one or two years, the great majority of the computers reviewed in **NWEC** will "be utterly irrelevant to anyone with a serious computer application." I disagree. Just because a new super widget has been developed that will widge your warbles four times as fast doesn't mean that everyone will junk their old widgets and buy the new ones. The old widget widges warbles just as good as it ever did. And it probably will for many years to come. Remember, widgets don't wear out. If a computer can be used now to solve a problem, it will continue to solve that problem just as well for at least five years, and probably ten. After that, the cost of a new computer will be less than repair parts for the old one. But watch out for hidden costs: taking the old programs and making them work on the new computer . . . .

Ken's assertion that the TRS-80 can't be used as a serious management tool is bullshit. Actually, a TRS-80 (or any of a number of currently available "hobby" computers) is probably better than a DEC LSI-11. The reason for this is a program called VisiCalc. This sophisticated financial modeling system is not available on the LSI-11. I have never heard of a program for



the LSI-11 that does a similar function as well, as easy to use, and as cheap.

Ken comes to one subject where we are in total agreement: computer-store salespeople. The only two I have ever seen who were good went to work as programmers for twice what the computer stores were paying them.

When Ken talks about 8-bit vs. 16-bit vs. 32-bit computers, he is babbling meaningless nonsense meant to impress newcomers. The old hands know that there is much more to performance than just the bit size. Most information that computers deal with is only eight bits big. Therefore, 16-bit and 32-bit (and 64-bit and . . .) computers have 8-bit instructions. Given everything else the same, a 16-bit computer will be faster than an 8-bit computer, but usually not twice as fast . . . .

Another important factor in performance is memory-addressing space — how much memory you can put in a computer. Most (but not all) 8-bit computers limit you to about 65 thousand bytes; most (but not all) 16-bit computers have a much higher limit (somewhere in the millions). But there are ways to cheat the limit. Apple designed the Apple III (6502) to use up to 262 thousand. Cromemco designed their System III (Z-80) to use up to 524 thousand. Other manufacturers have used the same technique to put that much or more on an Apple II.

In most computer uses that I see, disk access time takes up substantially more than half of the time that the computer is actually busy. Changing to a 16-bit computer can't speed up these uses more than 10 to 20 percent. But changing to a faster (and more expensive) disk drive can make the programs run two to three times faster . . . .

I see two main reasons why people buy computers. One: "I want the results"; and two: "It's a real trip to get that dumb machine to really do exactly what I want it to do." Both reasons drive me, but I am careful not to ignore one in favor of the other. There are some tasks that I would rather program, because writing the program looks like an interesting challenge. But each program always has grunge code — stuff that has to be there for the program to work, but that I have done so many times before that it is boring. To me, the interesting part of programming is the design, specifying just what is to be done and how to do it. All the details must be done for the project to be completed, but an architect would bore himself stiff if he drew all of the wall details. The interesting part is over when he says "Put a wall here." It's a real trip to see the finished product and to know "I created that." But when I mainly want the result, it just isn't worth it. Programming just isn't for everyone and for every time.

This brings up the subject of programming languages. All of the languages Ken mentioned are available, but there are many, many more. I divide languages up into two main classes: general purpose and application specific. All the ones he mentioned are general purpose. They can be used to write programs to compute anything which can be computed. True, for each task, some languages

are better suited for that task than others. But every general-purpose language can do everything.

Application-specific languages can only do tasks that they are designed for. But they do those tasks very well indeed. My name program was programmed in an application-specific language. (I actually bought the application language, not the program.) This language is designed for manipulating files of text data on disks. To program it for my needs, I just told it what my data would look like and what I wanted to call each item of data. The language already knew how to put the data items on the disk, how to print them, how to keep them in order, how to search for specific things, and many other common tasks. If I had been programming in a general-purpose language, I would have had to program each and every one of those things. That is time consuming and boring.

There are many different kinds of application-specific languages available. There are languages for drawing pictures, statistical analysis, telling robots what to do, teaching people, making up games, diagnosing diseases, examining census data, and a thousand and one other things. For people interested in using computers for results, this is the way to go. There is still the challenge of getting useful work out of the dumb beasts, but the amount of grunge work is chopped by incredible amounts. When I programmed my names program, it took about an hour. Most of that hour was testing to see if I had done it right . . . .

Application-specific languages are tools. But what kind of languages are application-specific languages written in? Usually, they are written in general-purpose languages by people like Ken and me. We write tools for other people to use in their work. But contrary to what he seems to be saying, not everyone needs to build their own tools. There is a lot of pleasure in building your own tools, but most people are much more interested in results. For most people I know, making wood chips fly is much more interesting than building lathes and saws.

Even if a person decides he needs a general-purpose language, I disagree with Ken when he suggests only PL/1 or PASCAL. PASCAL and PL/1 are excellent choices when the problem to be solved can be well defined before programming begins (e.g., most business programs). However, on a laboratory computer, controlling experiments that are never the same from one week to the next, FORTH is a much more appropriate choice. Different environments demand different languages, and each language has a niche where it is the best fit.

All general-purpose languages can be used to program any problem. The point is that no language is the best choice for all problems. To choose a language, first look at what problems interest you, then pick your language accordingly. If your problems change, consider changing languages.

Pat McGee
Houston, Texas

KEN CROSSEN'S REPLY

One point that came up many times in the critical letters is that some Fortune 500 companies are using TRS-80s for business applications. Very true, very true, as is the fact that numerous Fortune 500 companies bought Edsels. So what is the smart corporate money buying these days? IBM personals, of course. Given a few years, I believe that IBM will annihilate Radio Shack (TRS-80) and Apple in the business small-computer market. You would have to have been in the computer biz for ten-plus years to really appreciate how easily and efficiently IBM exterminates inept competitors. So why not buy an Edsel computer? Because you won't be able to get parts or service, the software relevant to you will never improve, the options in peripherals will stagnate, and it will quickly become "cheaper" to buy another machine. Commodore does not advertise its PET or Radio Shack its 32K Model II as primarily fun-and-games machines, but as real business computers. Which I say is hype. Nobody likes to think they spent $3000 on a toy. If these companies publicly characterized their machines as hobby systems, then "professional" would be honestly applied to (some) 16-bit and 32-bit machines, which is certainly how the market will pan out in the long run anyway. But then customers would have had fair warning, and nobody would get suckered. Many of the machines in the **NWEC** article are pretty sorry trash even as toys. As in most commercial transactions, the bottom of the barrel seems to collect most of the rotten fruit.

> There's been a missing link in this industry from Day One: Nobody has started with the customer to find out what he wants in a small computer. Instead of homing in on market segments and smoothing the interface between man and machine, they build stuff for technical people to play with. They think they're appealing to the layman, but they're really not.
>
> —Jack Melchor, **Fortune**, June 29, 1981

Memory

Just because it is humanly possible to push a pea up a mountain with your nose does not mean that this is the optimum way to do it.
—NATO Programming School

Committed 8-bitniks will say "I can do everything I will ever want to do on an 8-bit processor running the CP/M operating system, which by the way has the largest library of applications software." CP/M was the first experiment in mass use of computers by "nonprofessionals" but, unfortunately, was (crudely) modeled after contemporary (1975) *professional* operating systems. Future home and small-business markets will require operating systems intelligible to users that don't grok computers. It is encouraging to note that the ideas of Alan Kay (see "Smalltalk," **Byte**, August 1981 [**NWEC** p. 503]) are beginning to have some impact on the design of new operating systems (for the Corvus Concept, for example). Building "user friendliness" into computer software is very memory intensive — the user interface of a truly friendly program will typically be 30 percent to 50 percent of the execution code. Pat McGee made the excellent point that the vastly larger memory-addressing capacity of 32-bit machines is more important than execution speed. In this respect 8-bit machines are severely crippled by their 65k byte memory restrictions. Although many 8-bit machines now support more memory, CP/M software was (and will continue to be) written to be runnable on the common sub-48k byte machines. CP/M will probably remain the surly brontosaurus it has always been.

Sure there is more CP/M software than for any other operating system — but the great bulk of it is video games and much of the rest is of very poor quality. The **Byte** Software Review "Five Spelling-Correction Programs for CP/M-Based Systems" demonstrates an excellent case in point. A text file of 3000 words was salted with ten (known) spelling errors and then processed by the five programs.

One program was unable to find all ten errors, but worse yet, all five programs "found" from 42 to 507 (!) "misspelled" words that were in fact correctly spelled. The highly regarded Spellguard misidentified 141 correctly spelled words. This is no reflection on the abilities of the authors of these programs — it's pretty impressive that they did it at all in 32k bytes. Obviously a lot of creativity and memory was expended on dictionary-compression schemes that would have gone toward better performance in a 256k byte program.

My language recommendations also drew a lot of flack (not surprising). Much of the criticism centered around the existence of "application specific" languages, that is, computer languages tailored to specific tasks like running machine tools or doing artificial intelligence research. If I did nothing but write programs to drive industrial machines, I certainly would not use PASCAL. By analogy, an extraterrestrial being interested in touring the earth would not be well advised to learn only Sanskrit, Aleut, Kurdish, and Ibo. English or Russian or Chinese, like general-purpose computer languages, apply to a broader range of situations.

One thing about learning a special-purpose language for each of a lot of diverse little applications is that it becomes incredibly difficult to remember the various syntaxes without confusing them. No sweat for a $40/hour professional computer jock, but how about the average user?

Computer users who are financially committed to their particular systems tend to become emotionally committed as well. They adjust their expectations and thresholds of frustration to preserve their sanity and mask the annoyance felt by new or uncommitted users — they become comfortable within the familiar restrictions of their system, however tight. If a computer user is financially or emotionally committed to 8-bit and CP/M, it makes a certain amount of sense to stick with a familiar, working system. But why should a first-time buyer (the presumed audience for the **CQ** article) settle for a system designed before engineers really understood the emerging microtechnology? Why buy low on the learning curve when you can take advantage of the knowledge gained from the mistakes made in the design of CP/M at virtually no cost?

At the risk of drawing new howls of protest: If I had to buy a system now, I would buy an IBM personal (under $5000) or wait until the 68,000-based machines with UNIX-like operating systems shake out ($4000 to $10,000). In the latter category are the CRDS Universe 68, the Fortune 32:16, the Corvus Concept, the Radio Shack Model 16, and the new Apple in the works. This next wave of systems will be offered with the important "tool" software (word processors, spread-sheet calculators, data-base management, accounting packages, etc.) already available. Apple and Radio Shack (TRS-80) make decent hobby systems and are likely to survive the coming shake-out. —Ken Crossen

The New Alchemists

These New Alchemists aren't the energy/agriculture researchers whose work we've covered elsewhere, but the inventors and users of computers and microcomputers of the last three decades. Dirk Hanson had the persistence and lunacy to slog through the history of the Information Age and write it up for the rest of us. The political issues raised here — such as AT&T's involvement in the news media business, or the impact of electronic funds transfer on international banking, or the effects of automation and data encryption — will increasingly involve all of us, especially those who use computers. Though I'd quibble about some things Hanson left out, this is so far the best starting place for background, with a particularly good explanation of how the transistor industry evolved into the microchip industry. Not a great book, but one that's solid and readable. —*Art Kleiner*

●

The concept of the "smart" house had ample technical precedent. Russell Schweickart, former astronaut and now chairman of California's State Energy Commission, recalled: "My smart house was Apollo 9. In terms of resource planning, allocation of resources, efficiency and safety of operation — it couldn't have existed without those computers. Well, the homes we live in today, the buildings we work in, are primitive in terms of intelligence and information."

●

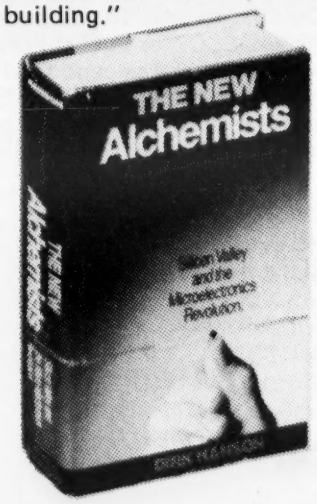
As improbable as it sounds, when the freight is electronic information the cheapest distance between any two points — New York to Los Angeles, say, or Des Moines to Djarkarta, or even Boston to Pittsburgh — may be the distance from earth to satellite and back, or about fifty thousand miles.

●

Evidence suggests that office automation has a tendency to aggregate workers into two clumps — the very skilled and the barely skilled. Or, "those who tend the computers and those who sweep out the building."

The New Alchemists
(Silicon Valley and the Microelectronics Revolution)
Dirk Hanson
1982; 364 pp.
$15.95 postpaid from:
Little, Brown and Co.
200 West Street
Waltham, MA 02154

or Whole Earth Bookstore



Content Style Consequence

South American Explorer

The South American Explorer *is a publication of the South American Explorers Club, a group dedicated to both exploration and wilderness conservation. I must admit to a bilious, outfront prejudice against explorers, anthropologists, and other seekers who open the wilderness while mouthing its sovereign integrity — which to me means leaving it alone, especially the "primitive" peoples who seem to be thriving there without our knowledge. However, the SAE seems exceptionally respectful of the land and its inhabitants, and apparently holds to that notion of exploration which finds value in the journey, not conquest.*

Someone tagged **SAE** *as Gonzo Guano, a description that catches the magazine's twisted charm but misses its substance. In addition to first person travel writing at its best, the magazine is practical, dry, solid, and thoughtful: monkeys of Ecuador; a history of the guano trade; how to pack with animals in the Andes; South America's National Parks; a general travel guide to Patagonia.*

Graphically, there's not much to praise. The type is too small; the paper is leftover semigloss stock from a Sears catalog; the photographs are murky; and it's all black-and-white. The reviews are spirited. The editing is generally sound, and even the lapses are interesting. In an equipment list for a car trek, this item appears: "A 7500 capacity wench." Made me winch just thinking about her. —*Jim Dodge*

For $10 over the SAE subscription price you can join the South American Explorer's Club itself. You'll receive use of the club's information services through their Denver, Colorado, and Lima, Peru, offices as well as discounts on their maps, guidebooks, storage facilities, and related travel services. —*Joe Kane*

South American Explorer
Don Montague, Linda Rosa, Editors
$15/year (4 issues) from:
South American Explorers Club
2239 E. Colfax Ave., #205
Denver, CO 80206

•

He was an Auca; and Aucas, we knew, could be dangerous. He motioned me to eat that hairy arm. . . .

. . . Surely, monkey meat couldn't be that bad.

I grasped the arm firmly, bit into its hairy skin, and chewed. And chewed. My companions did the same. "I can't eat the skin," I said to them as I surreptitiously slipped it out of my mouth. I watched Bob do the same and slide it into one of the huge pockets of his Army pants. Before long we were all covertly passing skin to him and then chomping into the meat and smiling at our host. The meat itself had a good smoked flavor and a very strong animal taste. About what one would expect human flesh to taste like.

The Auca chief smiled at us. His women smiled at us. We smiled back. Bob's pockets were bulging. It wasn't until the next day that I saw the Aucas eat monkey. They, of course, threw the skins to the dogs.

Content Style Consequence

Tributaries

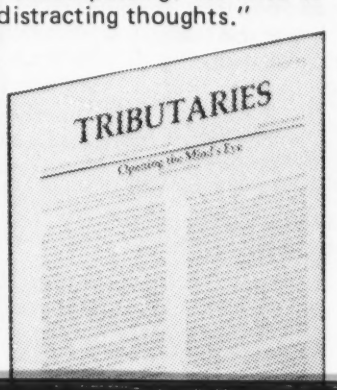
This modest publication subtitles itself "A newsletter to encourage clearsighted spiritual study." To that end it reviews an ecumenical selection of books touching on a variety of spiritual paths (Gurdjieff, Christianity, Judaism, Zen) while emphasizing the validity of each approach. **Tributaries** *also runs a smattering of news, notes, letters, and mini-reviews which encourage networking among its readers. The editorial tone is warm, and its intentions are honorable. My only complaint is that, as with many newsletters, the space is limited (a brief four pages), and thus one's appetite is whetted but never quite satisfied. Kudos, nevertheless, to non-sectarian bridge-building.*

—*Jay Kinney*

•

It's fairly obvious to a layman that the popularity of Oriental religious practice has stung Western religious professionals into fierce activity. They're saying, we have perfectly good methods available too, if only you'll remember our traditions. Two very readable books in this line are **Centering Prayer**, by Basil Pennington, OCSO, for Doubleday, and **The Experience of Praying**, by Sean Caulfield, OSCO, for Paulist Press. The latter is personable as well as descriptive, and Caulfield is writing more books, which is nice for all of us. Father Basil is more scriptural and instructional, but very encompassing. We liked especially his catalogue of "distracting thoughts."

Tributaries
Lorette Zirker, Editor
$8/6 issues (irregular publication) from:
Tributaries
Box 59
Sunspot, NM 88349



Content Style Consequence

Communication Booknotes

Topping my list of "Used Magazines" (Spring '79 **CQ***) was* **Mass Media Booknotes**. **MMB** *ground to a halt soon after the Federal Communications Commission hired the editor, Chris Sterling, away from academia, but now that Chris is out among the living again, he's resumed publication under a new name —* **Communication Booknotes**. *Format's nearly the same, but coverage has expanded to include foreign language publications, making this already indispensable bibliographic service even better. Just about everything of any consequence published in the fields of media policy, popular culture, broadcasting, informatics, journalism, etc., quickly makes its way into these pages; 30-plus short, sharp reviews per issue.* —*Robert Horvitz*

Communication Booknotes
(Recent Titles in Telecommunications, Information and Media)
Christopher H. Sterling, Editor
$15/year (12 issues) from:
The Center for Telecommunications Studies
George Washington University
2000 L Street NW
Suite 301
Washington, DC 20052
(Make checks payable to George Washington University)

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Teleconsumers & the Future: A Consumer's Manual on the AT&T Divestiture (National Citizen's Committee for Broadcasting, P.O. Box 12038, Washington, DC 20005 — $20.00, paper) is a short (57 pp.) manual used at several recent NCCB day-long meetings on the January 1982 divestiture tentative settlement. It focuses on the likely impact of the settlement on local telephone rates, what consumers can do about it and how to find out more . . .

Content Style Consequence

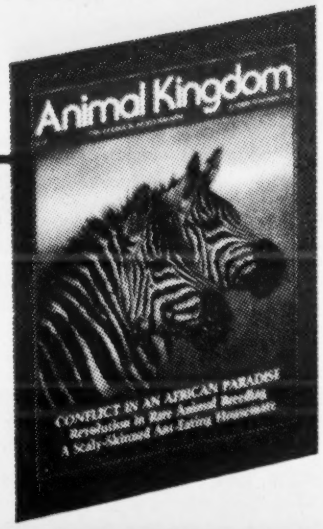
Animal Kingdom

I had been beating around the newsstands looking for a conservation magazine that fit my tastes. I had in mind a sign over the library door at the Time-Life building: "Never underestimate the intelligence of your audience. Never overestimate their information." I was looking for a magazine that was "Whole Earth," that understood how Third World poverty undercut conservation efforts, that had experience with zoos and the necessity of breeding programs, and yet was highly readable. **Animal Kingdom** *is close and getting better with each issue. In fact, I decided to write for them. If you want engaging wildlife photos plus a lot more conservation muscle, this is the bimonthly for you. (I'm prejudiced, of course. As a child, I learned natural history at the Bronx Zoo.)*

—Peter Warshall

If the white crane of Siberia is to fly into the twenty-first century, it will need the sustained attention of conservationists in a remarkable number of great nations: the Soviet Union, India, Iran, Afghanistan, Pakistan, China, and the United States. Such is the dimension of the challenge and of the potential for cooperation in saving the majestic creature whose annual flights embrace the largest and most populated of continents.

Animal Kingdom
Eugene J. Walter, Jr., Editor
$8.95/year (6 issues) from:
Animal Kingdom Magazine
New York Zoological Society
Bronx, NY 10460



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On August 11, as the evening rush hour peaked on highways around the Bronx Zoo, a holstein cow in a zoo barn gave birth to her first calf, a husky 73-pound male. Those of us present were jubilant, for the calf was not a domestic holstein but a gaur, *Bos gaurus*, a wild ox native to southern Asia, whose kind has more than once turned the tables on tigers attempting to stalk it. Better yet, this calf made history.

Content Style Consequence

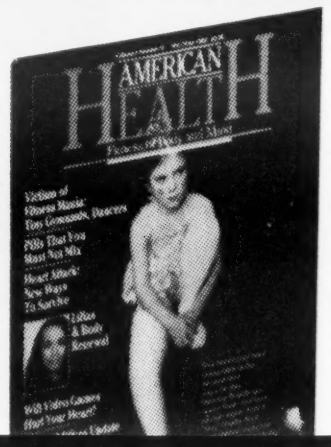
American Health

Good news for health nuts, and that includes more and more of us these days: T George Harris, the maverick publishing mastermind who started **Psychology Today**, *is back with a bimonthly health magazine that delivers useful, readable health information and up-to-date medical news. The first three issues cover mostly fitness, nutrition, and psychological medicine, with a piece on folk or herbal medicine, environmental health, or medical consumerism here and there.*

From the first issue veteran health writer Joel Guren, **AH***'s managing editor, has done a fine job of keeping the articles readable without getting slick. In subsequent issues the staff has added regular departments on dealing with doctors and new medical technology and refined some of their too-splashy graphics.* **American Health** *started good and seems to be getting better.*

—Tom Ferguson, M.D.

American Health
T George Harris, Editor
$12/year (6 issues) from:
American Health
P.O. Box 10034
Des Moines, IA 50347



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Surveys suggest that as many as a third of those who are told by one doctor they need an operation will be told they don't if they seek a second opinion. . . .

Judged to be unneeded: a third of the hysterectomies and bunionectomies; a quarter of the prostate, nose and knee operations; and almost a fifth of the breast operations, cataract removals and D&C's.

In a surprising number of cases, the second-opinion doctors found *no* illness.

•

According to a study reported in the **American Journal of Public Health**, dairy farmers in Vermont had more trouble breathing than a matching group of Vermont industrial workers. True, the city workers had to cope with air pollution, not to mention whatever detritus was fouling the air of their particular workplace, but the dairy farmers had to contend with animal dander (tiny scales from hair, feathers or skin that may be allergenic enough to get anybody's dander up), pollen, molds and all the chemicals that are part of modern farming.

GOOD MOVIES

by Sheila Benson

The Verdict

THE VERDICT is the role Paul Newman has deserved for years. Like **On Golden Pond** for Fonda, it allows him a one-role summation of his craft. As a rummy, on-the-skids Boston-Irish lawyer who is thrown one last job by a fellow lawyer (Jack Warden) with the assurance that it will be the last favor ever, Newman sustains a many-faceted performance of such restraint and such exquisite observation that it takes your breath away. The film was directed by Sidney Lumet, and happy to say, it has nothing in common with the noisy **Prince of the City** except the same rich tones in the photography of Andrzej Bartkowiak. Only once do characters stand yelling at each other, easily a Lumet record.

David Mamet's adaptation of Barry Reed's book gives the film subtlety on a variety of levels: As a look at the state of the law today, as courtroom drama at its most ingenious, and as a love affair between two battle-scarred adults (Newman and Charlotte Rampling). It's written with understanding, speed, and all the right ellipses. The film's second-level accuracies include its flawless portrait of the Boston Irish (here including Milo O'Shea as the presiding judge and James Mason as the head of the town's most prestigious law firm), whose cronyism and parochialism add up to networking at its most infamous. **The Verdict** is top-flight entertainment, and for all its control and precision, it gives Newman (like Burt Lancaster in **Atlantic City**) room enough to show what rewards there can be for an actor who never stops learning and growing.

★ ★ ★

TOOTSIE is just what we've been looking for these last arid months, a generous, funny entertainment with a backbone of intelligence. In this hilarious comedy of character, Dustin Hoffman plays a dedicated actor whose perfectionism has made him almost unemployable. (He won't take a director's suggestion to move, while playing a tomato, because he is a *vegetable*, for God's sake, and vegetables don't move.) Determined to prove that he can get and keep a role so long as directors don't know who he is, he wins a sustaining part in a daytime soap disguised as a woman. Suddenly, from his vantage point as Dorothy, an actress who never shrinks from speaking her mind, Hoffman is thrust into an intimate look at a world he was never quite made for.

The longer Hoffman lives as Dorothy, the more indignant he becomes. He begins by fussing over what Dorothy would or would not wear (as roommate Bill Murray stands watching with owlish fascination), he ends being a spokes-, ah, *person* for Dorothy's dignity and rights as well as those of Jessica Lange, cast as the soap's sunny moral delinquent. (Gaining Lange as a best girlfriend isn't the way Hoffman would prefer to know her best.) The script, credited to Larry Gelbart but worked on by several others, never becomes a tract, for the humor never flags. And we can see Hoffman's character both as a deeply talented and idealistic actor and as a towering pain in the ass. Dorothy is one of Hoffman's major performances, a miracle of observation and delivery, but everyone in the cast is strong: Teri Garr, Dabney Coleman, Charles Durning, and in a delightful relevation, Sydney Pollack, the film's director, as Hoffman's furious/friendly agent.

★ ★ ★

What a winter this is for actors. By far the most wide-ranging, taxing role has gone to Ben Kingsley, a half-Indian, classically trained British actor who plays Gandhi in a monumental and stately three-plus hour production which has obsessed its maker, Richard Attenborough, for 20 years. Kingsley succeeds stunningly in illuminating a complex figure. His Mahatma is a man of humor as well as honor, a stubborn, prideful, modest, devout, loving real man, clearly lit from within with a rare spark. It is also a performance of amazing physical likeness, and with the bare minimum of external props Kingsley ages the film's 45-year age span under our eyes, shrinking and becoming lighter and more frail. It is the problem of the film, not its actors, that we never seem to

Tootsie

comprehend exactly the source of that spark.

John Briley's script gives us a history-book full of facts as painlessly as possible, and Attenborough has alternated the domestic with the panoramic views. By the film's end we know thoroughly the climate and the events which allowed India to collect enough strength to end British rule. But we may not be moved as a film on this subject must move us. **GANDHI** is always engaging but never cathartic. It absolutely belongs on a "Good Movies" list, however, for its careful, intelligent treatment of its subject and the chance it will give audiences to approach the life of the father of non-violence.

★ ★ ★

HAMMETT is being roundly disliked in its first few showings but it fascinated and still haunts me. I don't see it as a mystery or even some sort of opium dream of film noir but as a look inside a writer's mind, where imagination and everyday life jostle each other for a place on the page. Frederic Forrest is the perfect choice for the dapper Dashiell Hammett, an ex-TB patient writing in a seedy San Francisco apartment in the late 1920s. The story is labyrinthian but trackable. Private detective Peter Boyle is Hammett's ex-partner, whom the writer is now using as a model for a successful pulp detective series. Figuring that Hammett owes him one for this and a past favor, Boyle pulls him into a search for a missing Chinese girl, and from there into the decadent behind-the-scenes world of

Gandhi

Hammett

high politics and brothel shenanigans in Chinatown.

All the while there is the writer's world, which we enter by way of close-ups of Hammett's Underwood typewriter (which must be 40 feet tall and weigh 300 pounds) as he hammers people into characters and incidents into stories we will finally recognize. The opulence of the production may not seem like film noir to some people, for it is all richly, densely theatrical and in color. Yet the two don't seem incompatible, and director Wim Wenders has caught the malaise of the period exactly. Besides Forrest's impeccable Hammett there is a treasury of juicy performances by Boyle, Roy Kinnear (now grown corpulent enough to be a Sidney Greenstreet stand-in), Elisha Cook, and Lydia Lei, wriggling on and around Hammett's overstuffed armchair as she tells him, wide eyed, of the "terrible, *horrible*" things she learned when at twelve years old she was sold into a brothel, where she became "a terribly skilled whore, so ver-ah, ver-ah wicked." Delicious.

★ ★ ★

Jerzy Skowlomowski is not as well known as he should be, but with **The Shout** and the much earlier **Deep End** he established himself as a sharp, original stylist. Now we have **MOONLIGHTING**, a brilliant watercolor sketch of a film with deep-reaching reverberations. Jeremy Irons has the central role as the leader of four Polish workmen brought over to refurbish the English flat of their Polish boss. Even paying them in full is an immense saving over hiring British laborers. Suddenly martial

Moonlighting

law is declared at home, and as the only one among them who understands English, Irons makes the desperate choice not to tell his men and to proceed with the work.

"I can speak their language," Irons says of the English, "but I don't know what they really mean." It sums up the situation of every emigre/visitor in the world. Frantically trying to keep everything together, running out of money, living in horrible isolation, Irons becomes in exile what his countrymen are rebelling against. How even one comic moment can be eked out of this agony is only one of the small wonders of this highly recommended, superbly textured and performed film.

★ ★ ★

If you were to create a collection of great comic moments of the screen, you would have to include one of England's most stately ruins, the face of Michael Hordern as he appears in **THE MISSIONARY**. He is Slatterthwaite, the perfect butler save for an utter lack of a sense of direction. Watching him conduct an earnest young missionary (Michael Palin) through a British Museum's worth of corridors, stairs, galleries, and passages, to end unblinkingly in a broom closet, may stay in your mind, too, as great comic inevitability. The story, set in Edwardian 1906, feels like a conscious attempt at the spirit of the great British comedies of the 40s and 50s. The cast is equal to it, but the story meanders almost as greatly as Slatterthwaite. However, since civilized humor is almost as rare these days as civilized humans, this comedy of innocence and licentiousness at play in the fields of the lord and certain ladies may cast a gentle and pleasant glow upon you, too.

★ ★ ★

There's only one way to take Werner Herzog, and that's straight. Once you ever start to doubt his vision, or to notice that the vision is grand but the accompanying film is only grandiose, or that **Aguirre** said it better (and more succinctly) than **FITZCARRALDO**, then you are lost. That's why Les Blank's documentary,

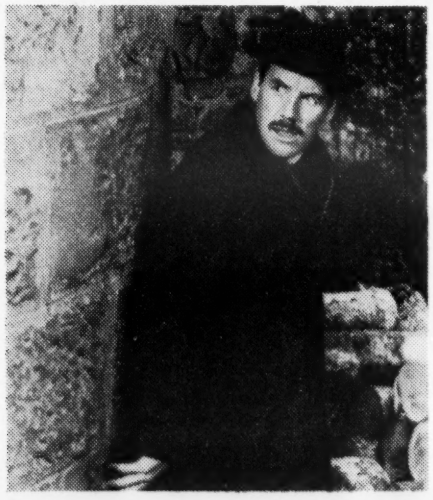
Fitzcarraldo

BURDEN OF DREAMS, wreaks such unintentional havoc with its subject, Herzog and **Fitzcarraldo**. In Blank's astonishing documentary we watch Herzog become more and more deeply enmeshed in the diabolical complications which seem to accompany his every film, though never so much as in this four-year ordeal in the Peruvian jungle. As Herzog says dourly in Blank's film, "Nature here is vile and base, the trees are in misery, the birds are in misery – the birds don't sing, they screech in pain," he appears not only to be on the verge of collapse but of self-parody.

No one is ever allowed to say, calmly, that moviemaking doesn't have to become some sort of moral proving ground. It does to Herzog. And, perversely enough, that is what illuminates parts of **Fitzcarraldo**. It is a monument to passionate filmmaking, and in this day of films made for every reason save passion, that alone makes it a film to be seen.

As most people have heard by now, for his telling of the legend of the Irishman Fitzgerald, whose name came to be pronounced *Fitzcarraldo* in South America, Herzog hauled a steamship intact up a 40-degree grade in the Amazonian jungle. (The real-life Fitzgerald had the boat torn into 14 sections to accomplish the job.) The driving energy which obsessed Herzog to complete the film, without which he would have been "a man without dreams," may have blinded him to the fact that he had little more than a heroic central metaphor. (Losing Mick Jagger, one of his central characters, may also have denuded the film.) Yet there are moments in this jagged and beautiful work when "because it is there" is reason enough. ■

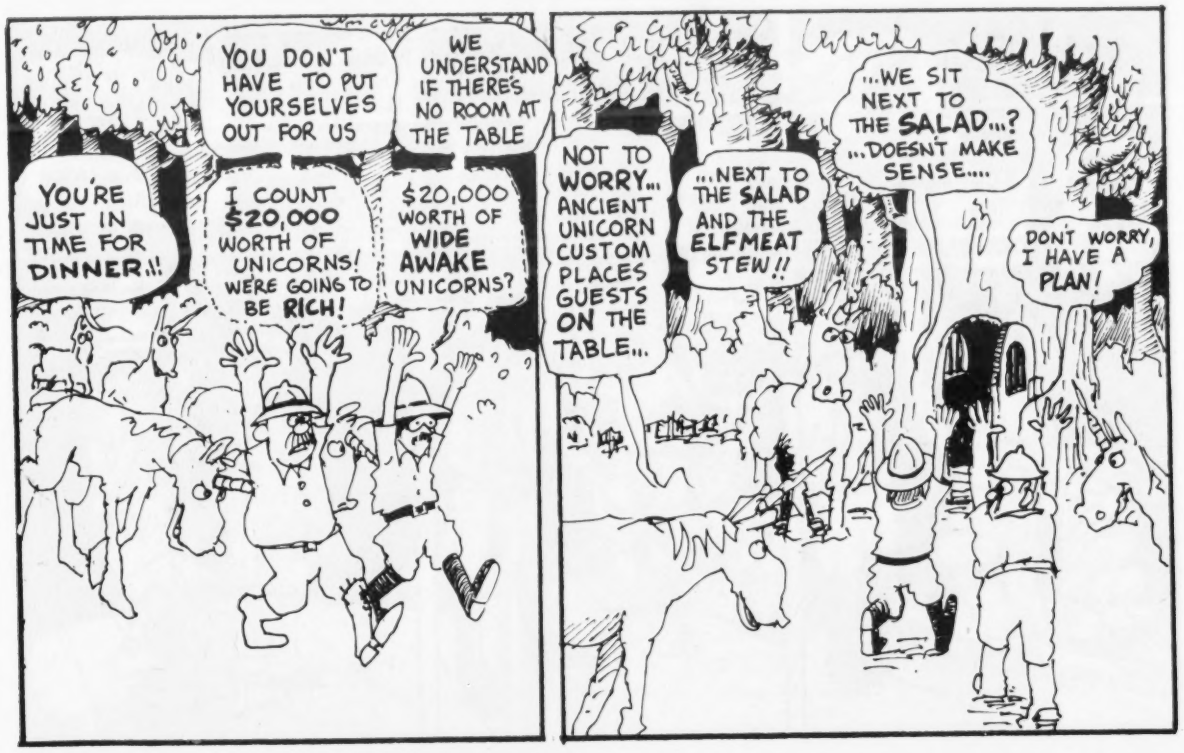
The Missionary



THE THINGS I DO TO PAY THE LIGHT BILL...

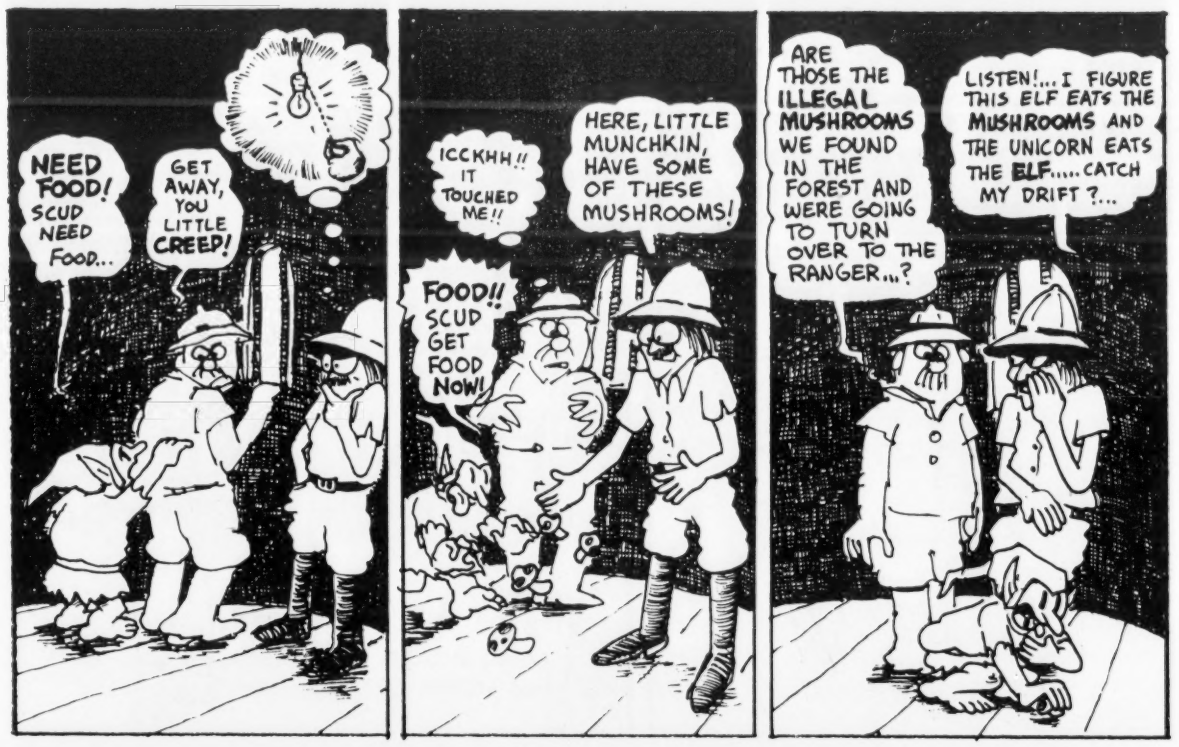
I **REALLY** HATE ELVES, TOO.. SO READ ON.. THE STORY OF THE GREAT UNICORN HUNT.. ELF LOVERS, BEWARE..

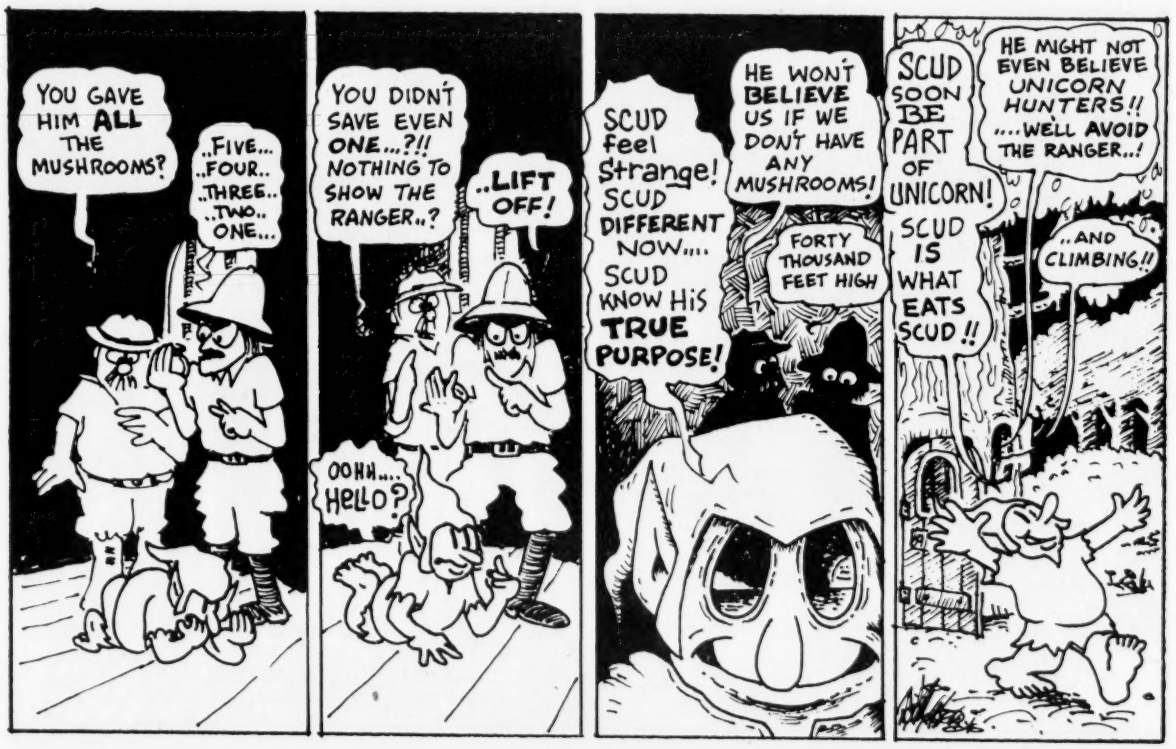
O'NEILL


YOU'RE JUST IN TIME FOR DINNER!!
YOU DON'T HAVE TO PUT YOURSELVES OUT FOR US
WE UNDERSTAND IF THERE'S NO ROOM AT THE TABLE
I COUNT $20,000 WORTH OF UNICORNS! WE'RE GOING TO BE RICH!
$20,000 WORTH OF WIDE AWAKE UNICORNS?
NOT TO WORRY... ANCIENT UNICORN CUSTOM PLACES GUESTS ON THE TABLE..
...NEXT TO THE SALAD AND THE ELFMEAT STEW!!
...WE SIT NEXT TO THE SALAD...? ...DOESN'T MAKE SENSE....
DON'T WORRY, I HAVE A PLAN!

COME WITH ME, LITTLE LUNCH MEAT!
AS SOON AS WE SIT DOWN AT THE TABLE, YOU THROW THE ELF STEW AT THE BOSS UNICORN AND IN THE CONFUSION...
UNLESS WE'RE PART OF THE LUNCH!
YES.. EAT SMEG.. ..NOT SCUD!
NO! NO! NOT EAT SMEG!!
I'M TOO YOUNG TO BE LUNCH!! BESIDES, I HAVEN'T PAID MY BAR BILL.... WH.. WHAT ARE THEY DOING?..
.... I'LL ESCAPE AND GO FOR HELP.....?
MY, THAT'S UGLY!!

I THINK WE SHOULD PASS ON THIS LUNCH INVITATION!
EXCELLENT IDEA....
NO
KICK!
AAIEEE!
SQUOOCH
I WIN..

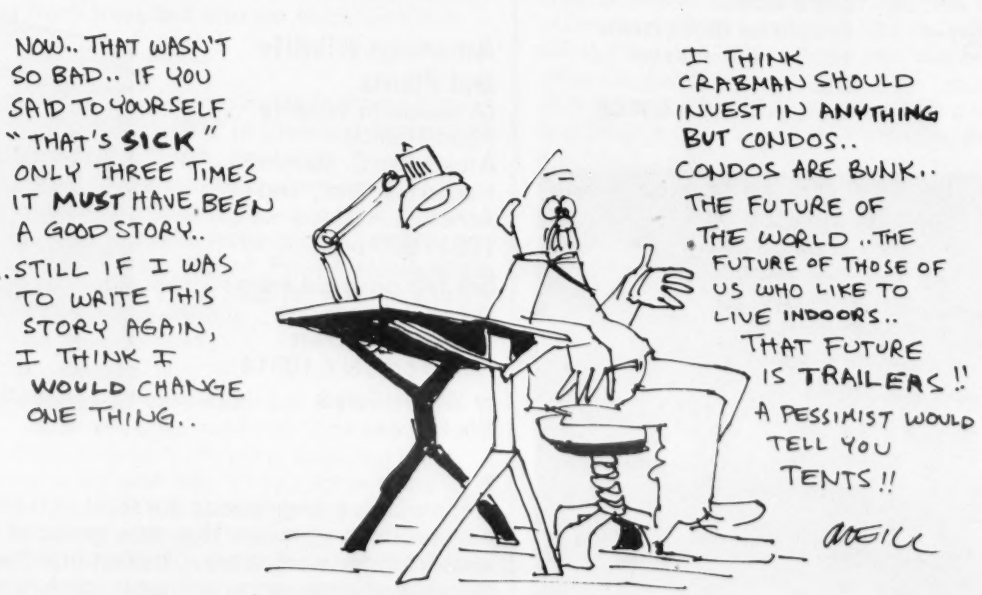

NEED FOOD! SCUD NEED FOOD...
GET AWAY, YOU LITTLE CREEP!
ICCKHH!! IT TOUCHED ME!!
HERE, LITTLE MUNCHKIN, HAVE SOME OF THESE MUSHROOMS!
FOOD!! SCUD GET FOOD NOW!
ARE THOSE THE ILLEGAL MUSHROOMS WE FOUND IN THE FOREST AND WERE GOING TO TURN OVER TO THE RANGER...?
LISTEN!... I FIGURE THIS ELF EATS THE MUSHROOMS AND THE UNICORN EATS THE ELF..... CATCH MY DRIFT?...


YOU GAVE HIM ALL THE MUSHROOMS?
..FIVE... ..FOUR.. ..THREE.. ..TWO.. ONE...
YOU DIDN'T SAVE EVEN ONE...?!! NOTHING TO SHOW THE RANGER..?
..LIFT OFF!
OOHH... HELLO?
SCUD feel strange! SCUD DIFFERENT NOW.... SCUD KNOW HIS TRUE PURPOSE!
HE WON'T BELIEVE US IF WE DON'T HAVE ANY MUSHROOMS!
FORTY THOUSAND FEET HIGH
SCUD SOON BE PART OF UNICORN!
HE MIGHT NOT EVEN BELIEVE UNICORN HUNTERS!! ....WE'LL AVOID THE RANGER..!
SCUD IS WHAT EATS SCUD!!
..AND CLIMBING!!

HOPE THEY ENJOY THE STUFFING!
TRY A CREDIT CARD ON THE DOOR
TURN IT A LITTLE MORE ON THE BACKSIDE, LEROY!
MEDIUM RARE LEG FOR ME...
MMM... THIS IS A FAT ONE!
I LOVE TO CRUNCH LITTLE ELFIN FINGER BONES!
GOOD IDEA! GIVE ME A CREDIT CARD...
YOU DON'T HAVE A CREDIT CARD?.. GAD!
RATTLE RATTLE
EAT MUNCH BITE CRUNCH SLOPP SCARF RIP SCUD

WHEN YOU HIRED ON THIS EXPEDITION, YOU TOLD ME YOU WERE A TRUE AMERICAN... HOW IS IT POSSIBLE YOU LACK A CREDIT CARD?!! A TRUE AMERICAN WITH A CREDIT CARD COULD ESCAPE!...I DONT BELIEVE THIS! HOW DO WE GET OUT OF HERE...?
THEY LEFT THE DOOR OPEN!!
RIGHT.. THEY LEFT THE DOOR OPEN..
I'M FLYING.. I'M FLYING!!
♪ Hello, little Flower... ♪
ANOTHER GOOD IDEA....
HEY!..THE GUNS!

NEEDLESS TO SAY, WE CAUGHT THEM IN A CROSSFIRE...
FOUR DEAD UNICORNS!... THAT MEANS TWENTY THOUSAND BUCKS!! WE'RE RICH!
...RICH ENOUGH TO PUT A DOWN ON A CONDO!!
THERE'S BIG BUCKS IN CONDOS... FORGET THIS UNICORN HUNTING...
CRABMAN


NOW.. THAT WASN'T SO BAD.. IF YOU SAID TO YOURSELF "THAT'S SICK" ONLY THREE TIMES IT MUST HAVE BEEN A GOOD STORY..
..STILL IF I WAS TO WRITE THIS STORY AGAIN, I THINK I WOULD CHANGE ONE THING..
I THINK CRABMAN SHOULD INVEST IN ANYTHING BUT CONDOS.. CONDOS ARE BUNK..
THE FUTURE OF THE WORLD ..THE FUTURE OF THOSE OF US WHO LIKE TO LIVE INDOORS..
THAT FUTURE IS TRAILERS!!
A PESSIMIST WOULD TELL YOU TENTS!!

LAND USE

Chainsaw Lumbermaking

Over the years, we've shown all sorts of devices that let you turn trees into boards with a chainsaw. Now here's a book that tells you how to use the things. The author discusses the entire process starting with selecting trees. One critical matter, the sharpening of the chain, is dealt with in more detail than anyone but a longtime expert would possibly know. There are even plans for making your own lumber-making machine. I especially like the hundreds of photographs — in this sort of business you need all the help you can get to stay safe and sane and still have a satisfying stack of boards by sundown. It's all entirely professional. He's even color-coded the pages for easy reference to the several subjects. —J. Baldwin

Chainsaw Lumbermaking
Will Malloff
1982; 213 pp.
$23 postpaid from:
The Taunton Press
52 Church Hill Road
Box 355
Newtown, CT 06470
or Whole Earth Bookstore

Beneficial BioSystems Fly Traps

The variety of items sent to **CQ** *for review ranges from ten-foot crosscut saws to solar-powered beanies, and there's almost always someone to take the new gizmo home and test it. But when the organic fly trap arrived there was a curious lack of volunteers. Something about the device lacked pizzazz. I wasn't especially inspired either, but on the other hand the chicken yard was knee deep in flies so why not try it out?*

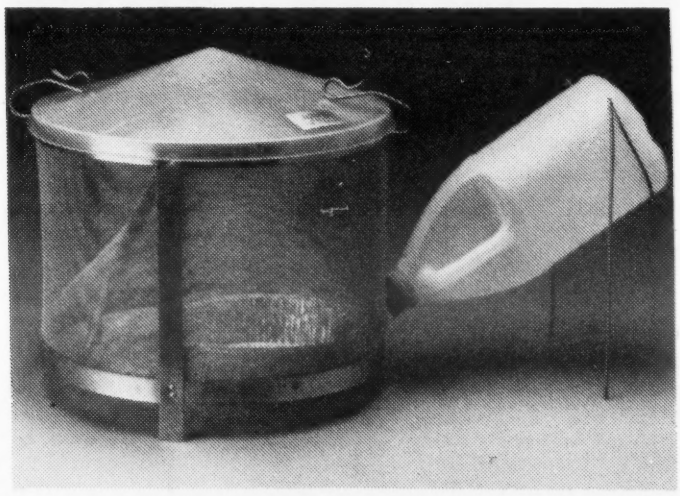
I took it home, mixed up the yeast and ammonium-carbonate bait and gave it a few days to ripen into a really rank liquid which then went into a pan under the cone-shaped screen. Then I capped on the translucent plastic dome, set it out in the chicken yard, and didn't come back till afternoon. Hey look! The flies are having a convention! There're a couple hundred in the little wire-domed AstroTrap. Yes, basic fly gluttony had suckered them into the exitless chamber and subsequent fly demise. It didn't add chemicals to my environment, but the fact remains that I'm offing flies by the gross and probably screwing up my karma again.

If your fly problems are both serious and outdoors, this is a likely solution. The unit requires only ventilation and overhead light, like the sun. The single ongoing expense/effort is refilling the bait pan with foul-smelling substances considered yummy by the fly population. It can be the company-supplied refill bait or the last experiment you did in the kitchen, the one that no human would eat. Flies are not critical thinkers. Neither are chickens. When I opened the trap and dumped out a load of expired flies they were gobbled up quick. Ecology in action. —Dick Fugett

Beneficial BioSystems Fly Traps
$20.95—$32.95

Information
free from:
Beneficial BioSystems
1603 — 63rd Street
Department O
Emeryville, CA 94608

Small trap with Optional Reservoir



If you use one saw engine both for felling and lumbermaking, you will now need to remove the felling bar and crosscut chain. . . . Chain often gets tangled into what seems like a hopeless mess when it is moved around. To roll the kinks out, hold the chain in both hands. Starting with the most serious kink, roll the chain as shown. Pull the two loops into the final loop, and you're ready to mount the chain on the bar.

American Wildlife and Plants

Suppose you are interested in a certain animal and want to find out what it eats. Maybe you want to plant what it likes in order to attract it to your yard, or alternatively, you want to remove the plants it likes to encourage it to leave! Or you might be attached to a certain plant and want to know what's been eating it. This book answers such questions. —Peggy Robinson

American Wildlife and Plants
(A Guide to Wildlife Food Habits)
Alexander C. Martin, Herbert S. Zim, and Arnold L. Nelson
1951; 500 pp.
$4.95 postpaid from:
Dover Publications
180 Varick Street
New York, NY 10014
or Whole Earth Bookstore

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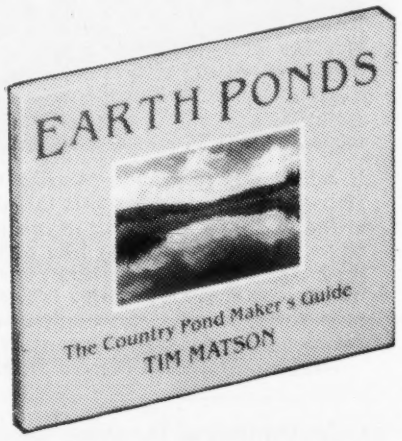
Not much is known about the food of hummingbirds beyond the probability that they get both nectar and insects from certain flowers. The fact that they are attracted by tubes of sugar water set out in gardens supports the assumption that nectar plays a part in their dietary role. However, stomach examinations of about 230 specimens —

Earth Ponds

Tim Matson's "Pond Sculpture" article in the Summer 1981 **CQ** *has now become a handsome book. Siting, construction, and maintenance are all considered, as are the benefits — recreation, irrigation, and aquaculture. And don't forget firefighting — if you live isolated from the fire trucks, having a pond and a handy pump and hose can make all the difference on a hot and gusty autumn day.*
—Richard Nilsen

Earth Ponds
(The Country Pond Maker's Guide)
Tim Matson
1982; 111 pp.
$9.95 postpaid from:
Countryman Press
Woodstock, VT 05091
or Whole Earth Bookstore



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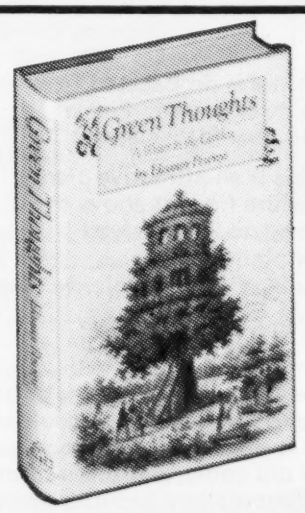
The sand drop is another well-esteemed pond keeper's trick that takes advantage of the ice deck. It's an upkeep technique well suited to older ponds in need of restoration, particularly where aquatic vegetation or mud gets unruly. To set up a sand drop, the pond keeper spreads a two-to-four inch layer of sand — not salted road sand — over the ice. In spring when the ice thaws, poof! The sand falls in a uniform layer over the basin floor. Sand works like an inorganic mulch, shading out weeds and, like the finings in a beer crock, holding down sediment. In muddy ponds, it's a good carpet material for the basin floor. One of my neighbors was able to use a sand drop to eliminate the slimy bottom in her family's pond, along with snakes and leeches. True, the sand drop does fill in the pond to a minute degree, but it's not often done, and it sure beats herbicides.

Green Thoughts

This collection of short essays is by a lady whose inquisitiveness about things horticultural is as apt to send her digging in a library as in her Connecticut garden. The resulting mixture of personal observation and opinion, history, and effortless prose make this a rarity among garden books — one that both informs and entertains.
—Richard Nilsen



Green Thoughts
(A Writer in the Garden)
Eleanor Perényi
1981; 292 pp.
$16.50 postpaid from:
Random House
400 Hahn Road
Westminster, MD 21157
or Whole Earth Bookstore

some of them collected immediately after visiting flowers — showed almost nothing but insects. Presumably the nectar is digested readily or escapes detection for other reasons. At any rate, the relative proportion of nectar and insects in the diet of hummingbirds is difficult to appraise and remains uncertain. Insects appearing most commonly in stomach examinations are small flies, ants, bees, and beetles. Besides taking nectar from flowers the hummers drink sap oozing from trees and also sip the juice from some fruits.

Cultivated Plants Visited by Hummingbirds (throughout the United States, but particularly in the warmer parts): Gladiolus, Petunia, Butterflybush, Sage, Iris, Fuchsia, Nasturtium, Columbine, Orange, Grapefruit, Lemon, Canna, Mimosa, Acacia, Geranium, Begonia, Hollyhock, Althaea, Hibiscus, Larkspur, Horsechestnut, Clematis, Morning-glory, Lilac, Lantana, Phlox, Four-o'clock, Rose, Chinaberry, Oleander, Eucalyptus, Scarlet Runner Bean, Lima Bean, Portulaca, Passionflower.

•

The grape-like clusters of Virginia-creeper fruits are important fall and winter food for wildlife. The berries ripen in the fall but many of them cling onto the vines until late winter, or until eaten by birds. Among the principal users of its fruit are such well-known songbirds as the mockingbird, robin, bluebird, brown thrasher, and various thrushes. Virginia-creeper growing as a wall cover or climbing over fences, trellises, or on tree trunks is not only ornamental but also attractive to songbirds. The leaves turn brilliant scarlet in the fall.

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How often does one see photographs of gardens taken in winter in the pages of magazines or books? It is assumed, and rightly, that they aren't worth looking at in that season, though it does occupy a quarter of the year. I attribute this to the American reaction to snow. Except in skiiers and a few eccentrics like myself, it arouses something like panic. It follows that the moment the snow does fly, gardens are closed down, more than closed — abandoned. Some people do make a point of buying living Christmas trees and later planting them in memoriam — a custom I deplore because it merely adds to the excess of evergreens already on the scene. In fact, we have never tried to devise a winter aesthetic, and the failure is the more striking in that the modern landscape movement has otherwise been so strongly influenced by the Japanese, who are masters of the genre.

But then the Japanese adore snow. It is an eternal theme in their art and literature, has even a spiritual value. . . . Far from resenting the snow that descends on his islands, the Japanese is deeply moved by the transfiguring effect on landscape and plants. And one must say that nature has blessed him: Japanese evergreens are extraordinary. They include the majestic cryptomeria, a relative of the sequoia; hinoki and sawara false cypress; the Nikko fir; *T. cuspidata* and other yews; exquisite pines, hollies, evergreen azaleas and ground covers.

With these to work with, it isn't surprising that the snow-laden Japanese garden is a wonderland. Nor is it an accident.

Gardening with Native Plants of the Pacific Northwest

Growing California Native Plants

Native plants are turning up in more and more gardens. Rare ones are being protected as habitats dwindle, drought-hardy varieties are saving on water bills, low-maintenance species are helping keep gardens green when budgets shrink. Aside from politics and practicality, native plants are beautiful. Think of them as local history, living anchors for your sense of place.

These two books are not the massive floras of the botanist but handy introductory books for home gardeners, covering several hundred regional species each. Kruckeberg excludes annuals and concentrates on woody and herbacious perennials, using mostly black-and-white photos of good quality. He has even bothered to include a list of the derivations and meanings of the genus and species names he uses in the text. The Schmidt book covers annuals and perennials, uses line illustrations with a few color plates, and covers about 350 of the more useful California natives for the home gardener. If there are books like these for your bioregion, let us know about them. —Richard Nilsen

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Oenothera caespitosa (Tufted Evening Primrose). Habit: Tufted, from thick caudex, stems to 8-10 in. Foliage: Linear-lanceolate, sinuate-pinnatifid, on long petioles, 1-3 in. Flowers: Large, fragrant, white aging pink, vespertine. April-August. Fruit: Capsule, linear-cylindric. Distribution: Dry or stony slopes, deserts, Santa Rosa Mountains, Riverside County to White Mountains, Inyo County.

Culture: Tufted Evening Primrose is propagated from seed, and volunteer plants can be expected. Plants require full sun, sandy soil, and very little water.

Estimate of Garden Value: This is an attractive plant with stems of large, fragrant, white flowers above the long, basal leaves. Although reported to be short lived, it will produce volunteer plants when happily situated. **—Growing California Native Plants**

Tufted Evening Primrose

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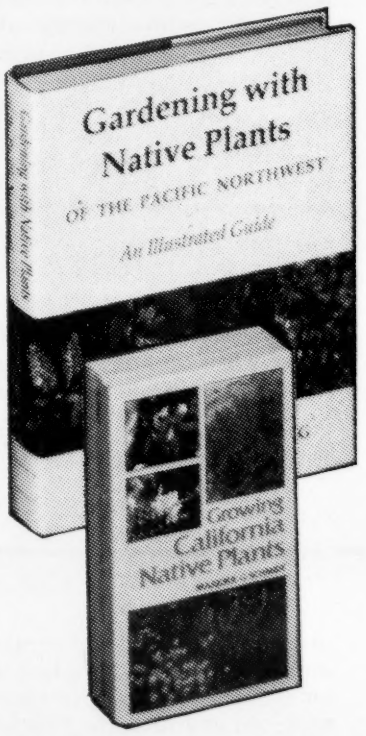
In the past it was common practice to dig plants in the wild for transplanting to the garden. What harm could come from taking a few samples of nature's seemingly unlimited bounty? Harm indeed did come, and these former ravagings of the wild have made some rare beauties nearly extinct.

—Gardening with Native Plants of the Pacific Northwest

NINEBARK (Physocarpus capitatus). **Rose Family (Rosaceaa). Look for this tallish shrub in open woods, along water-courses and in moist hedgerows throughout the westside country at low elevations. Though its leaves look like those of a mallow, currant, or even small-leaved maple, ninebark's affinity is with spiraea and oceanspray in the rose family. Its smallish white flowers are borne in dense pompoms, reminiscent of the snowball bush.**
—Gardening with Native Plants of the Pacific Northwest

Growing California Native Plants
Marjorie G. Schmidt
1980; 366 pp.
$9.45 postpaid from:
University of California Press
Order Department
2223 Fulton Street
Berkeley, CA 94720
or Whole Earth Bookstore

Gardening with Native Plants of the Pacific Northwest
Arthur R. Kruckeburg
1982; 252 pp.
$26.45 postpaid from:
University of Washington Press
Seattle WA 98105
or Whole Earth Bookstore



Lancaster Farming

If you farm in the Middle Atlantic states and want to keep up with farm equipment auctions and the price of new and used equipment from dealers, a subscription to the weekly newspaper **Lancaster Farming** *is the perfect way. Every week 20 or more complete sale bills are printed, and there is a calendar of sales for several months in advance. Most of the auctions are in east central Pennsylvania, but because circulation is regional, dealers and auctioneers from Virginia, West Virginia, Maryland, Delaware, New Jersey, and southern New York also advertise frequently. Because of the large number of Amish in the Lancaster area, horse-drawn equipment can often be found at Pennsylvania auctions, but the typical sale features conventional machinery. The paper has a big classified section, in which subscribers can run a small ad free once a month. The farm news is mainly local, but there are always several good general articles. We have saved hundreds of dollars going to sales and dealers listed in the paper.* *—Charles Planck*

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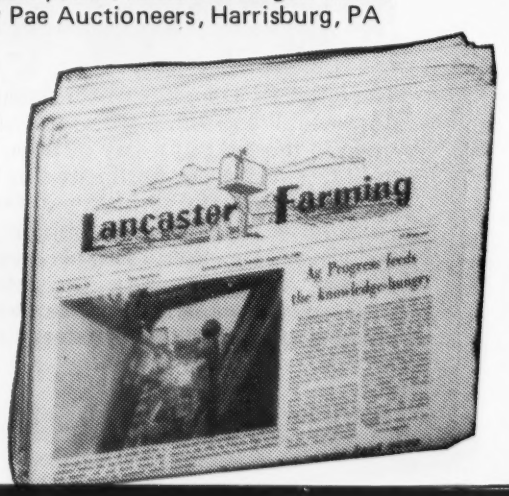
PUBLIC AUCTION, Thursday Eve. September 2, 1982, at 6:00 p.m.: Farm machinery & tools: John Deere Model 50 Tractor, 460 International Tractor w/Front End Loader, New Holland Hay Baler, Trail Type Sickle Bar Mower, John Deere Mounted Cultivators, 2 Section Disc 3 pt. Platform, John Deere Grain Blower, 3 Bottom Quick Hitch Trip Plow, Tractor Chains, Wooden Tongues, Hydraulic Cylinders, Single & Double Trees, Horse Collars, Walking Plows, Homelite Chainsaw, McCullogh Chain Saw, 1½ Ton Hydraulic Jack, Misc. Tools and Wagon Items!
—Kerry Pae Auctioneers, Harrisburg, PA

Lancaster Farming
Sheila M. Miller, Editor
$7.95/year (52 issues) from:
Lancaster Farming
P.O. Box 366
Littitz, PA 17543



The Future Is Abundant

Tilth (reviewed in the Winter 1981 CQ*) is an umbrella organization of people working to create a sustainable agriculture in the Pacific Northwest. Their indexed sourcebook is an up-to-date listing of alternative agricultural techniques, books, and organizations. It's amazingly complete. Careful editing of brief excerpts from sources old and new makes room for a mountain of information, and makes this book worthy of your library, even if you are miles from the Pacific Northwest. —Richard Nilsen*

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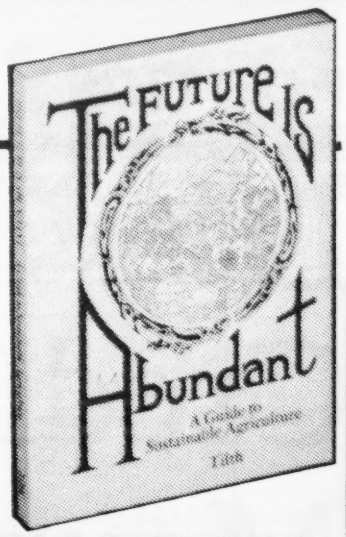
The Marisposa Foundation is an Idaho-based non-profit organization which is developing a conservation program for the revival of valuable plants, especially wild lilies. They are concentrating on the two most important lilies, the camas and the sego. These lilies were once widespread in the native prairie ecosystem. They provided an important part of the food supply for native Americans and later for trappers and pioneers, and are highly prized by wild animals as food.

The Future is Abundant
(A Guide to Sustainable Agriculture)
Tilth
1982; 192 pp.
$12.95 postpaid from:
Tilth
132117 Mattson Road
Arlington, WA 98223
or Whole Earth Bookstore



The camas and sego lilies have been greatly reduced in numbers and in their natural range. In some cases subspecies have become extinct, and many more are endangered. If lost, the genetic base of the lily family as a whole would be weakened, thus limiting the ability of lilies to survive changing environmental conditions.

For more information, contact The Mariposa Foundation, 415 Residence St., Moscow, ID 83843.

Fungi Perfecti • Shiitake Gardening

Very rarely, a Saran-wrapped cluster of larger-than-normal mushrooms appears at the local grocer. These larger mushrooms — the scrumptuous oyster or the mysterioso shiitake — are worth every dollar. After tasting them (just a little butter and a dash of black pepper is enough condiment for me), you will want so many more. You'll pick them out of your Chinese food just to have the flavor all by itself. Then you'll want to grow them. Well, here is sage advice from the two most respected fungi farmers of the Pacific Coast. **Fungi Perfecti** *is a catalog of high-tech equipment. Their mushroom growing kits cost $79 to $199.* **Shiitake Gardening** *is a booklet that teaches you to grow mushrooms right on oak logs. [Also see mushroom trees,* **NWEC** *p. 356.] —Peter Warshall*

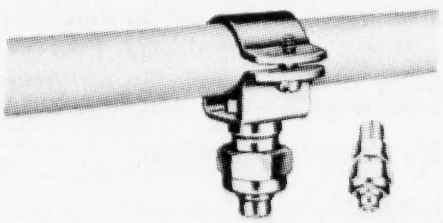
•

After much trial and error the past few years (mainly much firewood generated), I have developed a technique for cultivating Shiitake on wood logs which has a very high rate of success. In addition, the logs can be of almost any length, even as short as five inches. They can be grown in any available space — basements, garages, underneath porches, etc. One benefit of the procedure is that the spawn will grow out in as short as four months and fruiting will begin in one to one and one-half years from inoculation. Fruiting will then continue yearly on the same log for up to five years. **—Shiitake Gardening**

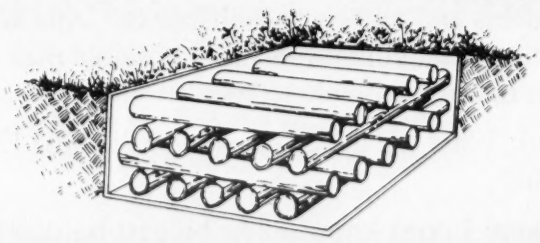
Fungi Perfecti
Catalog
$2 from:
Fungi Perfecti
P.O. Box 7634
Olympia, WA 98506

Shiitake Gardening
Bob Harris
1981; 11 pp.
$3 postpaid from:
Mushroompeople
P.O. Box 158
Inverness, CA 94937

or Whole Earth Bookstore



Misting Nozzles. A low pressure activated hydraulic nozzle sprays a wide angle cone of mist with exceptionally fine particle size. This fogging nozzle can easily be attached to ½ inch PVC piping by simply drilling a 9/32 inch hole, screwing it in, and fitting with the included gasket clamp. At 20-30 psi, this nozzle will emit 9/10ths of a gallon of water per hour with continuous use. $11.95
—Fungi Perfecti



Outdoor box dug in ground to hold logs inoculated with Shiitake spawn. It must be kept from direct sun, wind or any rain or moisture. It is kept there for four to six months and may be turned 180 degrees over every two months to insure even development.
—Shiitake Gardening

Fortex buckets

Wholesale Veterinary Supply

*I notice you have a mention of the Nasco Farm and Ranch Catalog (***NWEC** *p. 126) with an illustration of galvanized buckets. I use indestructible Fortex tubs and buckets made out of heavy-duty molded rubber. They cost about half again as much as metal, but are well worth it. Galvanized buckets always rust up eventually if they aren't crushed to death first by an enthusiastic cow or horse.*

Fortex stuff, veterinary supplies, and other animal equipment are available from Wholesale Veterinary Supply. They are efficient, fast, and courteous, and have a free WATS line for emergency orders. —Karen Cramer

Fortex tubs and buckets
$4.50—$11.50 postpaid
Wholesale Veterinary Supply
Catalog
free
Both from:
Wholesale Veterinary Supply
Box 2256
Rockford, IL 61131

Fortex CR850 15 GAL. (1½ Bushel) tub. A large volume feeder for multiple feeding of animals in less time. Makes an excellent salt and mineral feeder for cows, sheep, pigs, horses, etc. Large capacity is a boon to ranchers and breeders. $11.50.

Dow 2000 or Credit Collapse. Maybe Both.

arguing with Paul Hawken

Normally Paul Hawken writes every quarter about economics for **CoEvolution** *and spends most of his time tending to his business at Smith and Hawken Tools. These days however he's on the last lap of finishing* **The Next Economy** *for Holt Rinehart (due out in April, '83). The prospect of typing yet more about economics for* **CQ** *paralyzed his fingers, so we did it with a microphone. The conversation began with the current (November, '82) historic high of the Dow Jones Industrial Average at 1065 and with Hawken's interesting prediction written last March:*

"Since the economy is in part a political decision, the alternative [to an oil-caused credit collapse] is what I would dub an 'eerie boom.' After a gloom-and-doom spring and summer, interest rates might fall, and an economic recovery could begin which might carry us some two, maybe three, years. It is eerie because, during this period, none of the basic structural problems of the mass economy would be dealt with. . . ."

Stewart Brand: Is this what you call an eerie boom?

Paul Hawken: Yes. An eerie boom is essentially when money is being created that has no future basis. It doesn't come out of growth or potential growth. It comes out of debt or fear.

Brand: So are you calling off your prediction of a credit collapse?

Hawken: No, I won't call off my prediction of a credit collapse, because it's not so much a prediction as an inevitability of the system.

Brand: It's not a question of whether, but when.

Hawken: It's a question of when.

Brand: So, when?

Hawken: Well, if it doesn't happen in the next year, then I think that we could go through a business cycle of three to four years, but when we reach the end of that business cycle we will have an economy that is further weakened by its own debts and monetary foolishness. And at that time the credit collapse is more possible than it is today, but it is possible today.

Brand: What are the chances over the next 12 months?

Hawken: I don't know. The biggest burden that overhangs the financial markets now is not a monetary one but the price of oil. If the price of oil rapidly falls, then we'll see a credit collapse.

Brand: What's holding the price of oil up?

Hawken: Nothing as far as we can tell. It certainly isn't demand. Right now it seems that what's holding it up is the mutual realization by some producers and some buyers of oil that if the price of oil does go down they run a great risk of being trapped by deflation themselves. In Saudi Arabia the ARAMCO partners are drawing about five million barrels a day at the benchmark price of $34 a barrel, which is considerably more than the same oil companies can get that oil for elsewhere in the world right now.

Brand: So they're buying it at a loss.

Hawken: At four to five dollars a barrel. You're talking about losses anywhere from 20 to 25 million dollars a day on that oil. It's a question of how long the ARAMCO partners can sustain those kinds of losses. They can sustain them for a goodly while but not forever.

Brand: So it's a race between the eerie boom coming to the rescue and them drowning in expensive oil.

Hawken: That's how I see it. If there is a mild recovery and the putative business cycle, we'll see demand for oil pick up and we'll see pressure on oil prices to go down pull back a bit. It will be easier for the OPEC countries to sustain the benchmark price of $34.

Brand: Let me get this straight. A little while ago all of us were blaming OPEC and the terrible oil companies for doing all of these terrible things and raising prices. Now we've got to hope that

they're organized and greedy enough to keep their act together and keep the prices higher than they should be?

Hawken: That's right. If they cannot, I would say that the economy would suffer the biggest collapse we've ever seen. It could be two types of collapses, mind you. It could be an inflationary collapse or a deflationary collapse. Either one of them would be a credit collapse.

The reason for this is that the countries such as Venezuela, Indonesia, Libya, Iran, Iraq, and even Saudi Arabia pretty soon are no longer net gainers in terms of the amount of revenue they receive for their oil versus the amount of expenditures they have. They're going out into credit markets and borrowing money. They've amassed approximately 200 billion dollars worth of loans themselves. Furthermore other developing countries have amassed about 350 billion dollars worth of loans – primarily taken on during the last few years – to buy oil so that they could pursue industrialization in their own countries. If oil prices should collapse, we have a situation where the producers of oil like Mexico will be desperate for currency. If the price of oil falls they'll have every incentive in the world to lower the price of oil further to try to get more sales to get more hard currencies to service their debts.

Brand: So low prices instead of leading to less oil lead to more oil.

Hawken: To more oil and almost a panic, a disorderly retreat in prices, because the countries that were producers and living high on the hog are now hooked into that income. You can already see it in Libya and Iran – countries disobeying their own agreements with OPEC who are pumping more crude. And as more crude flows into the market the pressure on prices is inevitable. And if those prices should collapse, you will see default by countries. We can call it rescheduling or whatever we want, but it's essentially a default on loans.

You'll also see default in the United States. Many American oil companies are leveraged to their teeth. Just the steadying of prices at $32 a barrel in the domestic market helped bring about the collapse of Penn Square – a two billion dollar bank – and has brought many oil companies and drillers down to bankruptcy in the southwestern area of the United States. If you have a real collapse in oil prices, you'll have the only major industry that has really shown vigorous growth over the last nine years on its knees. It's a bad situation.

Brand: How low would the price of oil have to go for that to start to break loose?

Hawken: I have no idea. It's conceivable that the Saudis could reduce their prices to say $28 to $25 a barrel, and other producers might sober up and stop overpumping and come together again. That's possible. But if the Saudis go to $28 or $25 a barrel and other countries, because of cold, churlish resentments of Saudi Arabia's power, start to increase the amount of oil that they're pumping, then OPEC is effectively over as a cartel. Unfortunately, the demise of the cartel might take the western economy with it.

Brand: So the western economy has every interest to prop up the cartel. Can it do that?

Hawken: It's trying to. Exxon, Texaco, Mobil, Socal – they're doing everything they can to keep the price of oil up, even though they're hemorrhaging to do so. This is kind of an untalked-about fact of life. We don't see it in the business pages. Their best long term interest is served by bleeding.

Brand: How deep is their pocket?

Hawken: In the case of Exxon, Texaco and Mobil, it's pretty deep. If you've noticed, Socal has been busy for the last year canceling joint ventures, projects, partnerships all over the map trying to conserve its cash. How long Standard of California can continue to draw oil that it doesn't need at a price that is more expensive than it can buy elsewhere is anybody's guess.

Brand: So they need a vigorous eerie boom soon.

Hawken: Absolutely. The oil companies need it not to profit, they need it to survive as we know them. In fact, I think that within a decade some of our oil companies will be like our auto companies. At one time we were concerned about General Motors having too big a share of the market and being a monopoly. Now we're trying to hold our auto companies together and giving concessions and worrying about foreign competition. The same thing could happen for different reasons with the oil companies. Five or ten years from now we could be very concerned about their health.

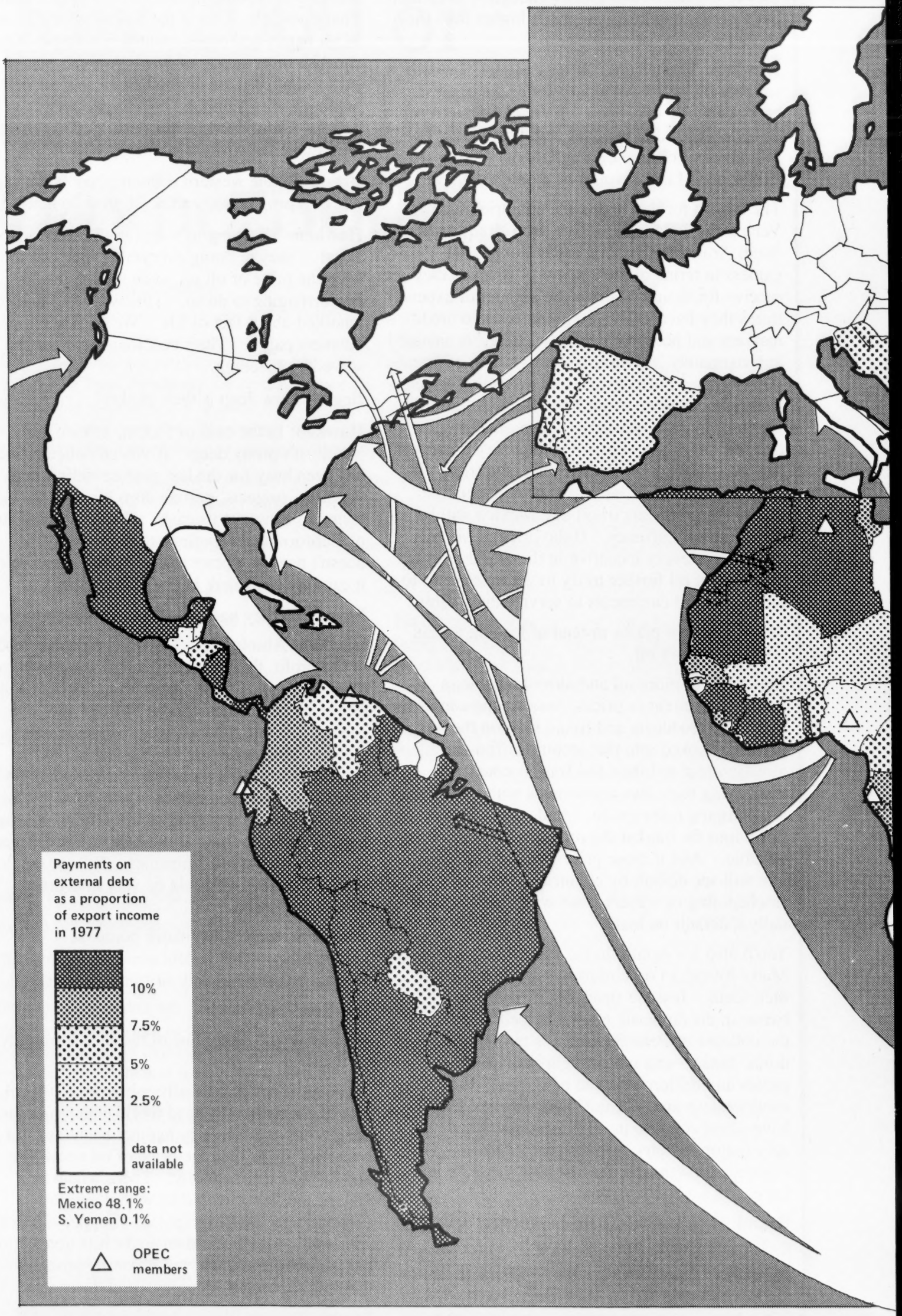
Brand: So there's two major points of vulnerability. One is debt everywhere and the other one is the fragilely sustained price of oil.

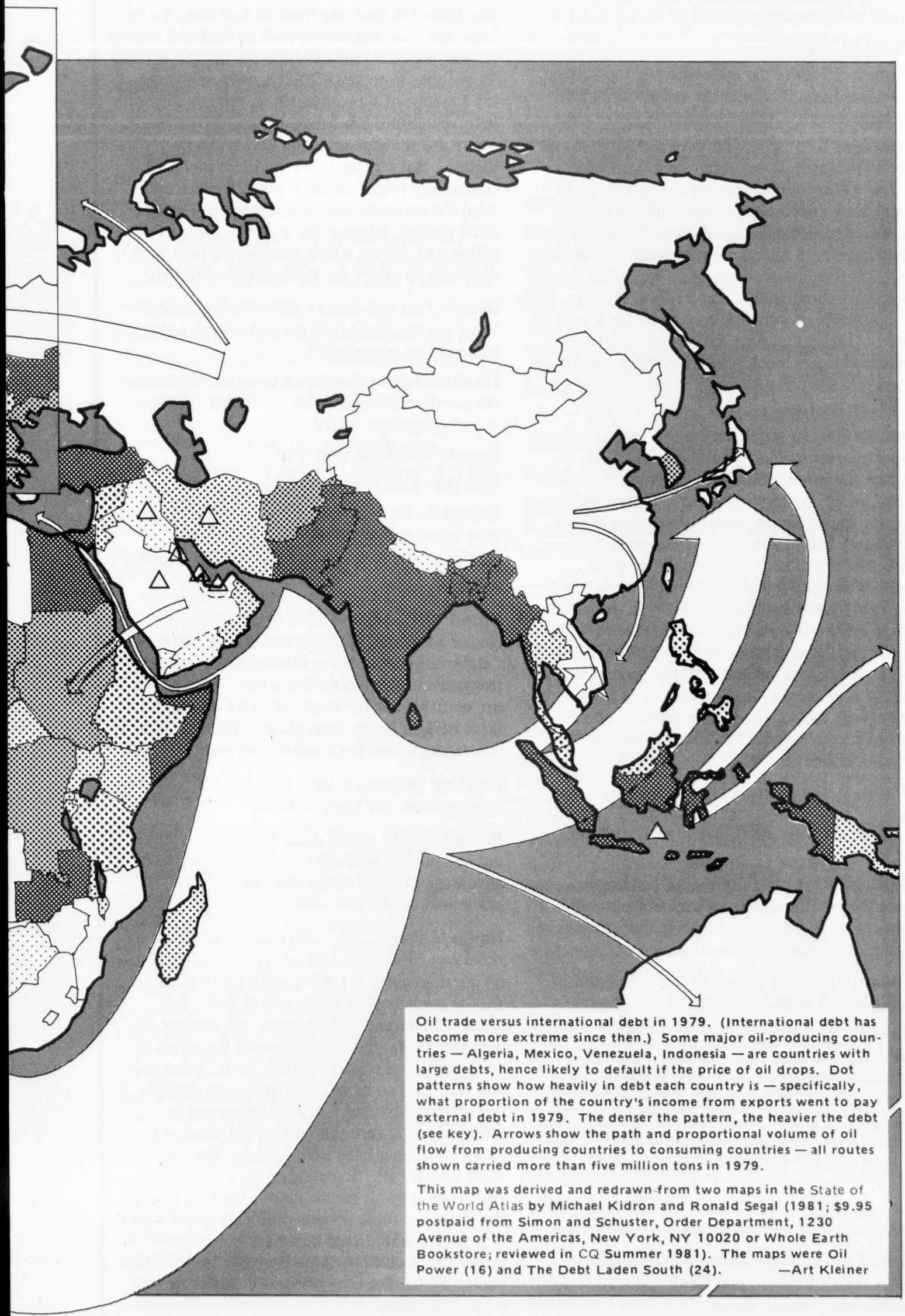
Hawken: Yes.

Brand: Would either one of those be a fragility by itself?

Hawken: They're mutually reinforcing. If oil was like a commodity and world economies didn't hang on it, and if money had not been lent and borrowed on it, then the price of oil could rise and fall like a commodity. There would be dislocation, but it would be within specific industries, specific geographies. Copper is in a tail spin and has seriously damaged Chile and Zambia, Arizona and Utah, but it doesn't pose any threat to the world economy. Oil does.

Brand: It seems like it's an oil economy, so if


Payments on external debt as a proportion of export income in 1977
10%
7.5%
5%
2.5%
data not available
Extreme range:
Mexico 48.1%
S. Yemen 0.1%
OPEC members



Oil trade versus international debt in 1979. (International debt has become more extreme since then.) Some major oil-producing countries — Algeria, Mexico, Venezuela, Indonesia — are countries with large debts, hence likely to default if the price of oil drops. Dot patterns show how heavily in debt each country is — specifically, what proportion of the country's income from exports went to pay external debt in 1979. The denser the pattern, the heavier the debt (see key). Arrows show the path and proportional volume of oil flow from producing countries to consuming countries — all routes shown carried more than five million tons in 1979.

This map was derived and redrawn from two maps in the State of the World Atlas by Michael Kidron and Ronald Segal (1981; $9.95 postpaid from Simon and Schuster, Order Department, 1230 Avenue of the Americas, New York, NY 10020 or Whole Earth Bookstore; reviewed in CQ Summer 1981). The maps were Oil Power (16) and The Debt Laden South (24). —Art Kleiner

DONALD RYAN

you've got debt madness and it partly expresses itself in oil madness . . .

Hawken: (agrees)

Brand: What are the indications to Joe Citizen that one or another of these various debacles is happening?

Hawken: Well, what you have now in the stock market is institutional response to lower interest rates. What the institutions are saying, and I think they are correct, is that with lowered interest rates stocks are much more valuable than they have been historically, and they are buying. Furthermore the economy is so weak that despite monetary stimulation by the Federal Reserve, there is no chance of inflation starting up for a year or two. During that time the change in relative values between stock prices and other markets is such that I think stocks will go up probably to 2000 on the Dow.

But the thing to watch during this time is not the stock market so much, but the price of oil. Watch the Middle East, watch the more arcane news about commodity prices. If commodity prices, including oil, start to rise, then we are definitely seeing a recovery of some sort. Whether it will be long or strong or weak, nobody can say for sure. My opinion is it will be weak, but nevertheless some type of business cycle. But if we see, say, a mild recovery in some metals, some foodstuffs (which by-the-way we have not seen heretofore), but no recovery in oil, or a weakening in oil prices, then I would be very, very cautious about the viability of a sustained rise in any market, particularly the stock market.

Brand: It sounds like a prudent investor might stay out entirely, but the semi-prudent investor, imagining a Dow 2000, would be trying to get in with both feet.

Hawken: Right, and if the semi-prudent investors trust their own instincts as well as their ability to process the information properly, they should be in the stock market if they like to make money.

Brand: What's the chance of the eerie boom being cut off in mid-boom?

Hawken: That's the concern that I have. I think that it's possible to stitch together an anemic economic recovery for the next three or four years. It takes political will, which exists in Europe, the United States, and Japan, and it takes control over fiscal and monetary policies. The control over the monetary policies is there. Fiscal policies are still out of control. The potential and the ability exist. What doesn't exist though is the ability to control the marketplace.

Brand: It's the uncontrolled marketplace that might take the price of oil down and lead to the catastrophe you talk about.

Hawken: Right. Markets are funny things. Markets, it is said, are there to fool you, not to lead you. So one way to look at the stock market is, yes, the fundamental value for the theoretical Dow Jones average of 2000 is definitely there. It's a matter of time and getting enough players involved before it reaches that magic number. There are some people who say, it can go higher. But it is the marketplace in terms of commodity prices which is going to determine what the economy does and doesn't do, not the stock market, because the world has lent itself trillions of dollars which can only be paid back if demand and prices for those commodities rise.

Brand: This still doesn't answer my question. What are the chances of the eerie boom being interrupted by something?

Hawken: I'd say that the chances are 50 percent, but are decreasing daily as the Fed relaxes its monetary policy.

Brand: Within the next what?

Hawken: Twelve to 24 months.

Brand: So there is a chance of credit collapse over the next two years?

Hawken: Yes, a credit collapse starting with the banking system.

Brand: OK. If there were even a 10 percent chance of a credit collapse in the next two years, I and everybody reading this would be scurrying to figure out what to do about that. You buy a fire extinguisher for even one in 100 chances of there being a fire in your place. What are the fire extinguishers for a credit collapse?

Hawken: Stepping aside a little bit, watching, not being greedy, not being seduced.

Brand: Greedy would mean leveraging yourself out and putting yourself in a debt position to take advantage of these riches that may or may not exist?

Hawken: Right. See, here's the irony of the situation. The stock market will go up. There's no question about it I think and a lot of money will be made both in paper and in fact. But given the international situation, the amount of debt that exists, the tenuousness in the prices of commodities, a prudent person would stand back and wait until some of these things are decided one way or the other. A prudent person is somebody who cares about keeping whatever they have managed to save because they have other uses for it. Somebody who wants to invest, should by all means invest, keeping in mind that there are some serious problems overhanging this market that are not being solved by the market no matter how high it goes. In fact, the higher the market goes, the more fragile the market becomes.

Brand: Are we talking about an explosion? A smoke detector won't help you with an explosion. It will tell you something you already know which is that you're being blown to bits.

Hawken: I don't see an explosion. I see a long decade, of trying to sort through the fiscal and monetary mess that we've created. When I say credit collapse I don't see 1929 at all.

Brand: Is there any chance of an explosion?

Hawken: I suppose so.

Brand: Suppose Mexico says forget the debt. Various out-of-power political parties in various countries in grave debt are now saying we're just going to forget our debt.

Hawken: In that case, you would have "disorderly reliquification" of the economy. Right now, what we are seeing is the re-establishment of liquidity into the system. The monetarist policy of the Federal Reserve is attempting to "refloat" the ship of the economy off of its weakness and near collapse. And as long as that process is orderly, gradual, and slow, it will not be too disruptive. Inflation will result, but only later. If, however, a sovereign nation walks away from the obligations, the financial community expects that the Federal Reserve will be lender of last resort and will re-create the funds that have disappeared in the default. If American banks lose substantial amounts of money, the central bank – in our case, the Feds – will quickly move to put new reserves into the banking system to save it. This would be a disorderly process of reliquification, and would without doubt result in highly erratic fluctuations of currency.

Brand: Is that runaway inflation?

Hawken: It's runaway inflation. If people didn't speculate it wouldn't be runaway inflation, but they will, because they're nervous.

It's very important to remember that in the last 200 years there have been three major international periods of inflation and collapse – in the 1820s, the 1870s, and 1930s. Each of those periods was preceded by a long period of drop in commodity prices – metals, foodstuffs, and raw materials. Each of them was preceded by an expansive period of international lending and borrowing. With the declining commodity prices foreign countries failed to service their debt, bonds went unpaid, and countries defaulted. In every case, Latin America led the way. Why this history is obscured and never talked about and not seen in some cyclical fashion, I don't know.

Brand: So besides propping up OPEC, we should be propping up every banana republic in sight that has sufficient debt. That's a curious situation.

Hawken: We can't prop them up, but I think that it's prudent to realize that they have unpayable debts.

Brand: So should we write them off?

Hawken: We can't write them off. Do you have any money in Bank of America? Do you want your checking account to be worth only 40 percent of what it was yesterday? It's not politically feasible to write those debts off and still maintain the integrity of the monetary system.

Brand: OK. They're not payable, they're not writable off, what are they?

Hawken: They're defaultable. The other thing that can happen is that they're inflatable. If over the period of a decade you make a dollar worth only 10 percent of what it was worth ten years prior, then those debts diminish in size and become more serviceable. However, the other side of that is, inflation is created through debt.

Brand: So it gets worse.

Hawken: The debt spiral gets worse.

Brand: So far each apparent cure is a palliative that makes the overall situation worse. Are there any real cures?

Hawken: Sure there are real cures, but they imply and require a level of understanding and cooperation both internationally and nationally that doesn't exist.

Brand: Imagine it exists, what would the cures be?

Hawken: Well, first the industrial world and the OPEC countries would have to come to some agreement about what the price of energy is and means. What does it mean to have oil at $34 a barrel? Is it a curse or blessing? Where does the money go for this $34 barrel of oil? Should it all go to OPEC? Would we be better off to have the price of oil start to go down? Shouldn't the difference between the market price and, say, a supported price go toward helping third world countries develop and industrialize and upgrade their standards of living?

After the collapse in the 1930s in the United States, we changed from a free market, laissez faire economy to a mixed economy, where we have heavy government participation in the marketplace. Since that time we have not suffered economic collapse. What we don't have yet internationally is a mixed economy. We have a free market economy out there, and it's punitive, not cooperative. It does not accomplish the greatest good for the greatest number.

Brand: Interesting. So if we're ever to see world government, it's likely to come not on war and peace issues, but on economic issues.

Hawken: I believe so, yes. ■

The Community Land Trust Handbook

The community land trust model, based on the work of Henry George, Ralph Borsodi, and Robert Swann, is a response to the increasing concentration of land-ownership in the U.S. It encourages acquisition and utilization of land in socially and environmentally responsible ways. Fundamental to this model is the concept that land, like the air and the water, is vital to the sustenance of all life, and must be viewed as a community resource.

As a democratically controlled, community-based organization, the community land trust can take many forms, and often develops in conjunction with other grassroots groups, such as non-profit community and housing development corporations or cooperatives. This very readable book lays out in a straightforward manner some of the issues involved in how we perceive land tenure in the U.S., how to organize a land trust, creative approaches to land acquisition and financing, and land-use planning for the future. It stresses a pragmatic approach, with sections on how to research land ownership patterns at the local and regional level and how to deal with access, security, equity and legacy in alternative land-holding settings. The book offers concrete case studies of numerous community land trusts and cooperatives in both rural and urban settings across the country, as well as an eminently usable bibliography for those interested in applying the concepts in their own communities. —*Bo Yerxa*
Pocomoonshine Lake Land Cooperative
South Princeton, Maine

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If leaseholders leave the land and terminate the lease, they may sell or remove the improvements which they own. Typically, the CLT retains a first option to buy the improvements at the owner's original invested cost, often adjusted for inflation, depreciation, and damage during the ownership period. This property can then be sold to the next leaseholder. Thus, the first leaseholder is guaranteed equity in the improvements, and the succeeding leaseholder is able to buy the improvements at a fair price. No seller will profit from unearned increases in market value, and no buyer will be priced out of the market by such increases. Any increase in value that is not due to a leaseholder's efforts will remain with the CLT.

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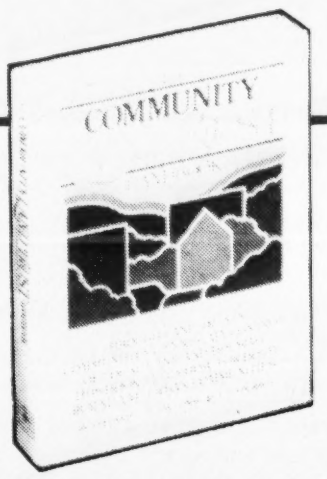
There are many paths to a CLT. New Communities, Inc., grew out of the civil rights struggle in the South.



The Community Land Trust Handbook
The Institute for Community Economics
1982; 230 pp.

$9.95 postpaid from:
Rodale Press
33 East Minor Street
Emmaus, PA
or Whole Earth Bookstore

A CLT was established in Clairfield, Tennessee, after years of local organizing around issues of health care, day care, and economic development. A CLT was established in Cincinnati in just five weeks when people were spurred to sudden action by the eviction of one of their neighbors. The Central Roxbury CLT emerged out of a successful community gardens program organized in one of Boston's inner-city neighborhoods. Other CLT's have had their origin in local efforts to preserve farmland, protect the environment, or create jobs and housing for persons urgently in need of both. In short, nearly any issue that brings people together to improve their community may prove fertile ground for a CLT.

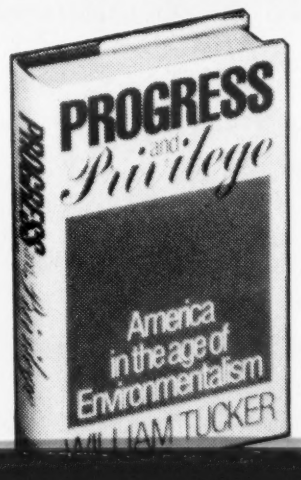
Joan Sully, Tim Mungavan, and Dorothy Jacobs with a block model used in neighborhood planning workshops. "We'd say, 'Here's your block and here are the new houses we have to put into it — how are we going to do that?' "

Progress and Privilege

A critique of environmentalism, a good one (detailed, fair, insightful), and not one to give easy comfort to environmentalism's enemies. It does give deserved discomfort to environmentalism's friends, who have been irresponsibly uncritical of their movement. Tucker assaults the aristocratic origins and trendy shallowness of environmentalist crusading and predicts that its time is passing. Fine commentary as far as it goes. I would prefer to see the movement assailed for its convenient pietism, which keeps it from becoming better science or better religion. As sharp science and profound religion, ecology (deeper than environmentalism) can generate crueler self-critics than William Tucker and long outlast him and his own trendy predictions of doom. —*Stewart Brand*

Progress and Privilege
(America in the age of Environmentalism)
William Tucker
1982; 314 pp.

$17.95 postpaid from:
Doubleday and Company
501 Franklin Avenue
Garden City, NY 11530
or Whole Earth Bookstore



•

I have often felt that the conversion to environmentalism occurs shortly after an urban, middle-class family finally purchases its first suburban home in, let us say, Maple Grove Acres. The family looks out the window at a beautiful field next door and exclaims, "At last, we're living in the country." Two months later, however, a nearly hysterical neighbor arrives with the bad news: "Do you know our beautiful field next door? Well, it's actually Maple Grove Acres II, and the builder is going before the planning board tomorrow night to get final approval on construction. We've got to go down and stop him." It is at this moment that an environmentalist is born. The problems of endangered species, overpopulation, and the deteriorating quality of life suddenly become startlingly real. It is time to stop development and start worrying about fragile ecosystems.

•

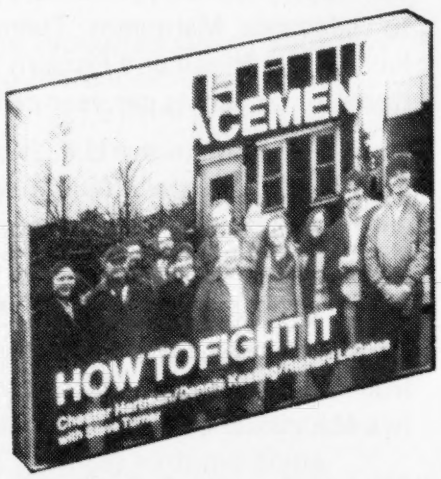
The Club of Rome was correct in pointing out that there were no economic incentives directly tied to controlling pollution. This has been perhaps the greatest public contribution of the environmental movement. Pollution is what economists call a "market externality." There is no price set on dirtying the air or fouling waters, even though there is a significant social cost involved. People don't pollute because they are bad, they pollute because it is cheap.

Displacement

Few experiences provoke as much frustration, outrage, and even grief as being forced to move. It's distressingly common — 2.5 million U.S. residents are displaced from their homes and neighborhoods each year. It's happened to me and many people I know. Written by a nationwide team of community lawyers and organizers, **Displacement** *describes all the methods by which you could be thrown out of your house — evictions, condo conversions, rent hikes, arson, and mortgage foreclosures just for starters — and the (mostly) legal methods for fighting back. (Sometimes the government eventually learns it's cheaper to give illegal squatters their occupied houses than to keep them empty.) Individuals about to lose their homes should look here, but the book is really about building and maintaining neighborhoods. It will instruct you in the legal hassling which is unfortunately necessary to keep a neighborhood intact.* —*Art Kleiner*

Displacement
(How to Fight It)
Chester Hartman, Dennis Keating, and Richard LeGates
1982; 224 pp.

$10 postpaid from:
National Housing Law Project
2150 Shattuck Ave.
No. 300
Berkeley, CA 94704



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The strongest defense so far developed against the perils and displacement of arson — and it is quite effective — is strong community and building organization, backed up by good research and a willingness to act. Fires rarely occur in buildings with strong tenant organizations, and alert community organizations can quickly deal with abandoned buildings before the arsonists get to them.

Shutdown

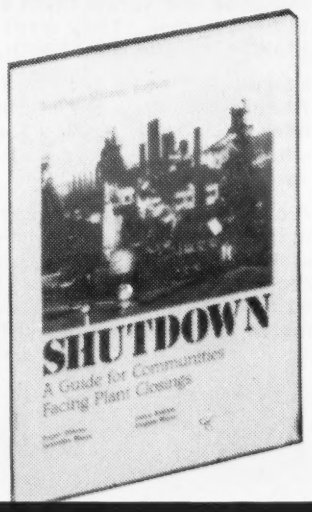
A well-written small book of practical tools for bouncing back from what seems at first like a hopeless economic catastrophe: the closing of a manufacturing plant in a small city or town. Like all crises, a plant shutdown means the whole community must work together. —*Art Kleiner*

•

In early 1976, employees of the Library Bureau of Herkimer, New York, learned that Sperry Rand, the parent conglomerate, planned to sell the plant. Local business people tried to buy it, and so did plant management, both without success. But later that year, when Sperry announced the plant's closing, the community coalesced. Labor, management, business, government, banks, and private citizens formed a holding company, the Mohawk Valley Community Corporation. The group packaged a deal, sold stock, and on September 28, 1976, jointly bought the Library Bureau where singly they had failed.

Shutdown
(A Guide for Communities Facing Plant Closings)
Jacqueline Mazza and Virginia Mayer
1982; 63 pp.

$8 postpaid from:
Northeast-Midwest Institute
P.O. Box 37209
Washington, DC 20013



BOX 428 SAUSALITO CA 94966

One of Atlantic City's proposed casinos purchased an entire block for their project. A lone resident refused to sell, even after an offer of over $1 million, plus lifetime free residence in the new hotel. After she turned the offer down, construction went ahead around her.

•

In places with no or weak laws regulating condo conversions, negotiating with the converter is an important tactic. Concessions won this way are nothing to be sneezed at. They might include lowering the sales price for all units, paying moving costs and relocation bonuses, extending time for tenants to move, or even reserving some units for low- and moderate-income tenants.

Negotiating for concessions is actually another term for squeezing the converter's profits. It's possible — even though many of the concessions listed above are quite costly to the developer — since speed is one of the important factors in the most lucrative forms of conversion. The converter's objective is to sell all the units in a building as quickly as possible and move on to other conversion projects, tying up borrowed capital as briefly as possible. So substantial concessions often will be made simply to avoid delays.

L.L. Bean's nuclear change of heart

In the Winter 1980 **CQ**, *we published a letter from L.L. Bean President Leon Gorman to* **CQ** *reader Jane Heart, explaining L.L. Bean's $5000 contribution to a campaign to keep open the Maine Yankee nuclear power plant (the referendum to close it lost and the plant is still running). This year reader David Dillman wrote L.L. Bean to ask "if their position in financially supporting nuclear power had changed." L.L. Bean representative D. Kilton Andrew replied, in part:*

In September of 1980 . . . the total lack of viable alternatives to a source supplying some one-third of the state's power struck us as a serious problem. Neither before nor since has this company had any other involvement with nuclear issues. . . . Recognizing the need for conservation and renewable energy in reducing dependence on coal, oil, nuclear — the hard sources — we turned our attention to the alternatives. In June of 1980 we began discussion with Maine Audubon which led to our contributing, to date, over $100,000 to fund several major public education and demonstration projects involving solar, soft alternatives and retrofit. . . .

The letter also said Leon Gorman is an honorary director of the Natural Resources Council of Maine, which actively supported shut-down of Maine Yankee. —*Art Kleiner*

RICHARD SPINDLER

Yacht hitching on the Leopard Normand III

HITCH A YACHT

I live aboard my steel 36-foot ketch and sailed around the world of late, hence my story: There is an easy way to hitch rides on yachts from ocean to ocean.

Every year about 700 yachts sail from Europe to the Caribbean and approximately 300 sail from the U.S. west coast to Tahiti, etc. Generally these yachts go away for a year but a small percentage continue around the world. About 60 to 80 yachts cross the Indian Ocean each year.

Yachts are almost always crewed by couples or men only and are short of crew for the longer passages. No experience is necessary, just taking turns in keeping lookout for big ships (call your skipper when in doubt).

I've sailed from Europe via Panama to such places as Easter Island, Tonga, Australia, Indonesia, Sri Lanka, Jakarta, Sudan, etc. To get to some places the *only* way is by private boat.

Yachts travel with the trade winds preferably and also in warm climates. This means they go *west*. Most land travelers go via Boeing 747 and go *east*. Here might be a conflict.

As we "yachties" are season-bound, here is an appropriate timetable:

1) From Europe to the West Indies and Caribbean: Check Gibraltar, or Gran Canaria (both excellent spots) in October, November, or December. Voyage takes four weeks.

2) From Panama to Tahiti: Help yachts with lines in the locks; check at both sides of the canal at the clubs in January, February, or March. Rides to Galapagos, Marquesas, Tuamotus, Tahiti. (With luck Easter Island and Pitcairn but only a half-dozen or so yachts per year call these places!)

3) From Tahiti to the U.S. (via Hawaii) or New Zealand and Australia (via Tonga or Fiji): June, July, or August. Lots of opportunities.

4) Australia to South Africa or the Mediterranean: Check Sydney Yacht Club in May or Cairns and Darwin in June, July, or August. Rides to Bali from where most yachts split to South Africa (via Mauritius) or Sri Lanka (via Singapore).

Also good spots: Bali: Port Benoa in August, September, or October. Singapore: Sembawang Yacht Club in October, November, or December. Sri Lanka: Galle Harbor (only 30 or so yachts a year pass there but several were looking for crew in early 1982). Capetown Yacht Club: South Africa to Brazil or the West Indies in January or February. Once you are in the system you will find out more.

How to find yachts: Cruising yachts generally have the following characteristics (nice when you're looking around in Los Angeles): Foreign flags, wind-vane steering gear, generally sturdy appearance, laundry of the people who *live* on board hung out to dry.

RICHARD SPINDLER

A yacht-hitching story: Larry Smith (left), 32, from California, joined an old friend in Massachusetts in 1981 to help remodel a recently bought boat and sail it to St. Thomas. They hit horrible cold and gales on the way down but lived. Larry hung around St. Thomas for a while, where he met Robyn Dowe (right), 27, from Queensland, Australia. She'd spent two years hitching yachts to England, Miami, Jamaica, and Barbados. On Antigua she became part of a four-woman crew for a rich guy on a Gulfstar 50 ketch. They sailed to St. Barth's with 60 cases of champagne and whatever they wanted in clothes, exotic foods, drinks, etc. She was supposed to sail to Spain but the yacht owner caught some of the crew smoking dope and threw them all off. She met Larry at a bar in St. Thomas. They went to Antigua and stayed a month looking for the right berth.

Larry and Robyn got in on the Leopard Normand III, a 74-foot schooner out of France. They recently sailed back there on it, toured Europe, and worked on the boat while it chartered the Med. They left it to go to Egypt and Tibet.

A couple of comments: Larry says there is some prejudice in the Caribbean against women who aren't at least moderately attractive. For anyone, getting on the first boat is the main difficulty. From there on you live and meet with boat people, and getting the right position is just a matter of being at the right place and being patient.

—Art Kleiner quoting Richard Spindler

Cost: Share food costs. This seems normal. I charged $50 a week for food and lodging and took care of all habor dues, oil, propane, etc. Some people still think this is expensive. (Nobody realizes that with depreciation, insurance, maintenance, and operating expenses, my boat ends up costing $50 a day.)

The best way to approach a skipper is to state that you're not the seasick type (check this out) and have money to share food *and* money to travel home in case of emergency. Show your proof in traveler's checks. Generally be helpful with work, cooking, etc. on board. With a bit of luck, a good skipper will teach you the ropes as well as navigation. Go for a week's trial if the route and time permit.

Leave the boat at the appointed end of your joyride. The ship is also the skipper's home and, as you will experience, affords little privacy. Boating is the last freedom left, but hassles with official permits, paperwork, visas, etc. are getting worse, especially in the so-called "free world." Still, it is beautiful to share the experience. And we do need more ladies out here (adventurous types naturally).

The best thing I ever did was to quit my IBM job (which earned me the yacht, thanks) and start living very very well on $300 a month (for food and maintenance of the boat with me doing everything myself). I have met people who have built a boat as good as mine themselves for $5000. (I wasted more like $100,000.) One learns.

Peter Morée
At sea (Mediterranean)

How to be a good hand aboard — for pride, for making a happy passage, for ensuring a letter of recommendation that will help with the next skipper, for aiding the cause of all yacht-hitching. The following excerpts came from the estimable **Ocean Sailing Yacht** *(Vol. 1), by Don Street (***NWEC** *p. 441).* *—Stewart Brand*

•

A good seaman recognizes the truth of the old adage "different ships, different long splices." The first thing he does upon arriving on board a strange boat is to survey all the gear, both on deck and below decks. He may seem like a pest, asking where everything is and where everything goes, but he makes sure he will not mis-stow anything. Similarly, he recognizes that different people coil line in different ways, and wherever he is, he coils line the skipper's way.

The good seaman arrives on board well equipped, with his seaboots, foul-weather gear, and other clothes, and with his knife, spike, and pliers. He stows his clothing where he is told, and carries his tools with him at all times, along with bits and pieces of line, which make his pocket seem like an old junk shop. He can give no good reason why he carries these, but they do come in handy. Furthermore, he comes prepared to do not just what is required of him, but much more. A ship crewed by a group of seamen each pulling more than his own weight is a happy ship.

•

All too often these days a good sailor is not a good seaman in that he cannot tie knots quickly and efficiently. To be sure, one can spend a tremendous amount of time learning all sorts of useless knots — I have never figured why boy scouts are taught to tie the sheepshank, for which there seems to be no possible use. But a seaman should know the bowline, figure eight, square knot, reef knot, sheet bend, double sheet bend, clove hitch, and rolling hitch. These are the knots normally used on a modern yacht.

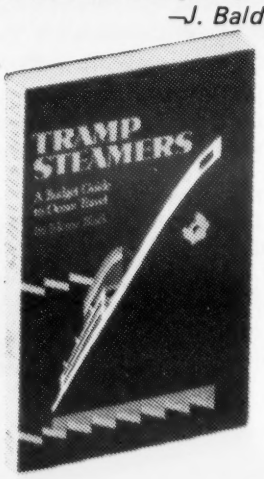
•

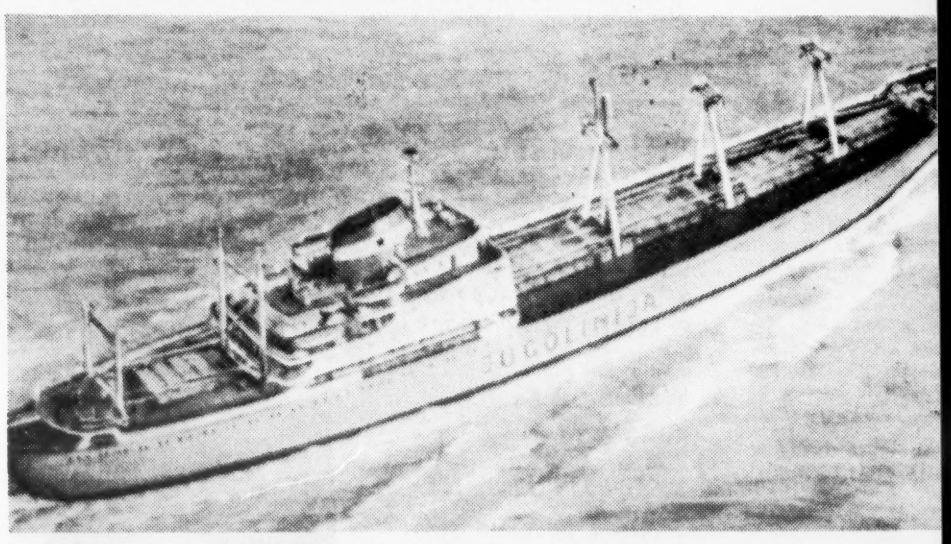
A good seaman anticipates emergencies. Though he may be sitting idly in the cockpit drinking coffee, his mind is not idle. Instead, he is thinking, for example: If the after guy on the spinnaker pole were to let go, what could we do to minimize the damage and repair it in a hurry? Or he begins to speculate with his mates about how the boat could be jury-rigged if the steering system were to pack up or the rudder to fall off. If a main boom broke, how might it be repaired? He considers whether the cabin floorboards could be used, and finds out if there are two-by-fours lashed up under the deckhead in the sail lockers. Again, what could a sea anchor be made of? Matters such as these continually occupy the mind of the seaman. Consequently, what may appear at first to be a brilliant maneuver improvised under emergency conditions may turn out to be a plan of action figured out two or three years previously, on another boat. Just as there is no substitute for experience, so there is no substitute for an inquiring, inquisitive mind.

Tramp Steamers

While not as cheap as one might hope, tramp steamer accommodation can be a great way to see the world. (This is different than "getting a job on a boat.") Tramp steamers book passengers, usually not many (maybe a dozen or so), and treat them well in comfortable cabins. They have schedules. They have such advantages as one-way passage and a very esoteric itinerary. This book introduces you to the specialized travel agents and many of the specific ships involved. If the idea intrigues you, this is where to start. *—J. Baldwin*

Tramp Steamers
(A Budget Guide to Ocean Travel)
Meme Black
1981; 165 pp.
$6.95 postpaid from:
Addison-Wesley Publishing
Jacob Way
Reading, MA 01867
or Whole Earth Bookstore





A 7,500 ton freighter of the Jugolinija Line, traveling New York or Norfolk to Yugoslavia via Casablanca, Valencia, and other Mediterranean ports; 8-50 days, $350-$2200; sails every 10 days, holds 12 passengers.

HANG GLIDING AND ULTRALIGHT FLYING

by Dick Fugett

They don't get you there as fast as airplanes and the rush is a shade less than parachuting, but if you truly love the sky then hang gliders do it best. For me it's the closest look ever at True Flight, that experience I have vicariously when I look up to see a circling hawk core a thermal for a free ride. Not to mention fresh air and the damnedest view in town.

Besides the glorious visuals, hang gliding can take you as close to the edge as you care to go. Anyone who likes the flavor of high-energy situations will recognize the intense, one-pointed concentration that results from running off the side of a tall mountain with nothing but a glorified dacron-and-aluminum deck chair separating you from the boulders down below.

To explore the topic via the printed word try these:

Hang Gliding *magazine is the main monthly contact. It originates in that same curious area that much of the sport comes from — Southern California. The stories are straight from the source, and some of the color photos have taken my breath away. They also list dealers and schools, enabling anyone new to plug in. The magazine is the official voice of the U.S. Hang Gliding Association, the organization that's done so well in keeping the sport well mannered and mostly out of the clutches of the feds.*

Whole Air *is a Tennessee-based magazine which gives better coverage of eastern events as well as maintaining enough contact with ultralights to keep readers informed of basic changes. Their glider comparison tests have good potential and a column of late-breaking news and gossip from manufacturers is irresistible.*

If you're really serious then it's time to hit the books. Your main author will be Dennis Pagen. Make sure you're serious, though, for the good info is buried in a demanding style. For a casual reader it can be hard work, but after you've experienced the sport it becomes more relevant. The basic book is **Hang Gliding and Flying Skills.** *When that's finished you go on to* **Hang Gliding for Advanced Pilots** *and* **Flying Conditions,** *the standard reference on micrometeorology.*

If you're still preparing for Pagen, or avoiding him, there's a new paperback called **Ultralight Airmanship.** *It's aimed at the powered machines but much of it deals with weather, soaring, and thermals in a style that's clear, readable, and pertinent to any pilot.*

A word about ultralights is necessary, since many still confuse them with hang gliders. Ultralights first manifested when a midwest hang-glider pilot, despondent from lack of mountains/launch sites, bolted a snowmobile engine onto his kite and gave birth to a new sport. Equivalents were quickly being produced in home workshops and sold fast at $2500, 10 percent of what a new Cessna 152 cost. All of a sudden flight was available to anyone. Demand was high and any seller had a market, regardless of quality. Flimflam promises could cover design and production errors until the checks were cashed, and very soon impatient, unprepared customers were in the sky with half-ass products. Before long their unskilled flight, ill-mannered style and high accident rate became a trademark.

The hang-glider people preferred silent, thermally powered flight, but to their bemusement the noisy little machines spawned like rabbits. It was most noticeable in the magazines: Each month the ultralight ads and stories occupied more column inches. The editors were responding to that famous 'bottom line.' Ultralights made money! **Glider Rider** *(Spring '81 CQ), whose style is still the freshest, found the ad revenue irresistible and now calls itself "the original ultralight magazine."*

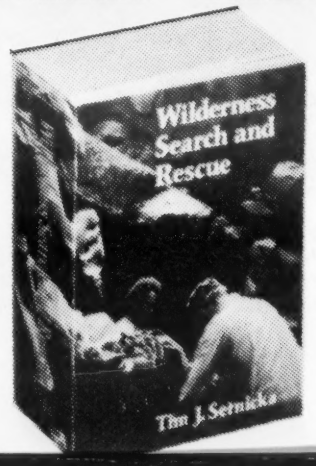
Hang Gliding *was going the same way, but there was a difference — it was the voice of USHGA and thus subject to membership vote. There arose a mutiny as the rank and file made it plain that pure flight meant more than the bottom line. When the vote came down the ultralights were purged. Although not as epochal as Jesus chasing the moneylenders out of the temple, it was an equally invigorating event.*

But ultralights didn't stay rejected very long, for even an uncharming daughter will be courted if her dad is a millionaire. General aviation's two largest organizations, the Aircraft Owner's and Pilot's Association and the Experimental Aircraft Association, have both formed sections

Wilderness Search and Rescue

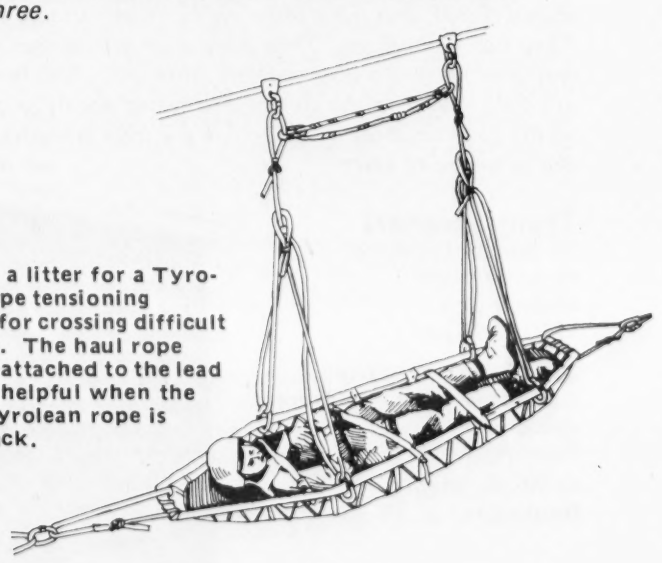
Walking through the woods hollering isn't the best way to find a lost kid. In fact, search turns out to be much more calculating than you might think. What to do when you find 'em can be even more complex. This professional's textbook presents the state of the art. It's a state that's changing too. I worked as an Arctic-based rescuer 25 years ago, and I note with some alarm that nearly all the techniques we used have been supplanted by much more sophistication. Much higher rate of success too. This process isn't hidden by the author either — he boldly gives examples of failures in order to show the sense behind currently approved procedures. Thankfully, detailed shots of flat climbers are minimized as is the other evidence of macho-hero stuff that one sees all too often in other books of this sort. You'll still need field training, of course, but this book is your homework. —J. Baldwin

Wilderness Search and Rescue
Tim J. Setnicka
1980; 651 pp.
$15.95 postpaid from:
Appalachian
Mountain Club
5 Joy Street
Boston, MA 02108



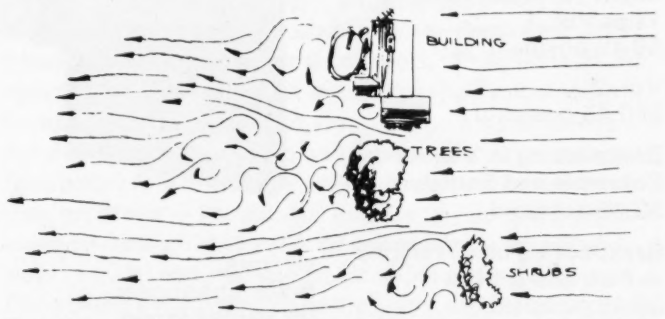
- Amazingly, one trained search dog can patrol a tract in six hours that it would take 106 workers 370 man-hours to comb with the same probability of detection.

- How low is the probability that the subject is stlll alive? The U.S. Coast Guard's data, for example, have shown that people have repeatedly survived far longer than was thought possible. A general rule of thumb for predicting survival is to multiply the time frame felt realistic for survival of a particular person in specific conditions times *three*.



Rigging a litter for a Tyrolean (rope tensioning system for crossing difficult terrain). The haul rope may be attached to the lead pulley, helpful when the main Tyrolean rope is very slack.

for the purged ultralights. Hopefully some pilot-proficiency programs will combine with the threat of further sanctions to produce basic change. The FAA just got done defining ultralights (single occupant craft weighing no more than 254 pounds carrying 5 gallons of fuel and having max cruise and stall speeds of 55 and 24 knots) but there's still no licensing of pilots or certification of airframes so there's plenty of room for design experimentation. The problem of aerial halitosis will take some work but vitality and innovation will eventually overcome, for ultralights currently represent the most available access to Flight, as well as being the next step forward in aviation. ■



Top view of turbulence. Avoid these areas in any significant wind. Turbulence is most often felt as gusts or sudden changes in the wind velocity. These gusts throw the glider around in flight and require quick, deliberate control movements from the pilot. Needless to say, a beginner should not fly in turbulence.

—Hang Gliding and Flying Skills

●

If very high in a thermal, perhaps over 14,000 feet, you will find it is almost impossible to tell the effect of oxygen starvation because the brain is the first organ to be affected. How can you comprehend what's going on if you can't think? Some experts say, "Look at your fingertips to see if the color under the nails is turning bluish, to indicate lack of air." This sounds fine except you can't think well enough to decide whether they are blue or not and to what degree.

The effects of altitude vary between people. I get an uneasy feeling of impending doom called "Dreads" while others have the same symptoms as being "Drunk." I notice my peripheral vision pulls in about 30 degrees so it seems as if I can only see clearly straight ahead. The sound of the wind becomes very quiet and the cold of high altitude is not so noticeable. I see little "blips," like the stars you see if you bump your head. Little dots pop up in front of my eyes and disappear.

A good way to check your condition is by doing what the Navy calls "Grunt Breathing." Take a deep breath, holding your mouth closed, and grunt to pressurize your lungs. You will immediately hear better and the vision out of the corner of your eyes will clear. The affect lasts only a few seconds but by grunt breathing you can see how much you change immediately after pressurizing your lungs. **—Ultralight Airmanship**

Hang Gliding magazine
Gil Dodgen, Editor
$22.50/year (12 issues)
from:
United States Hang
Gliding Association
P.O. Box 66306
Los Angeles, CA 90066

Whole Air Magazine
Starr Tays, Editor
$9/year (6 issues)
from:
Whole Air
P.O. Box 144
Lookout Mountain,
TN 37350

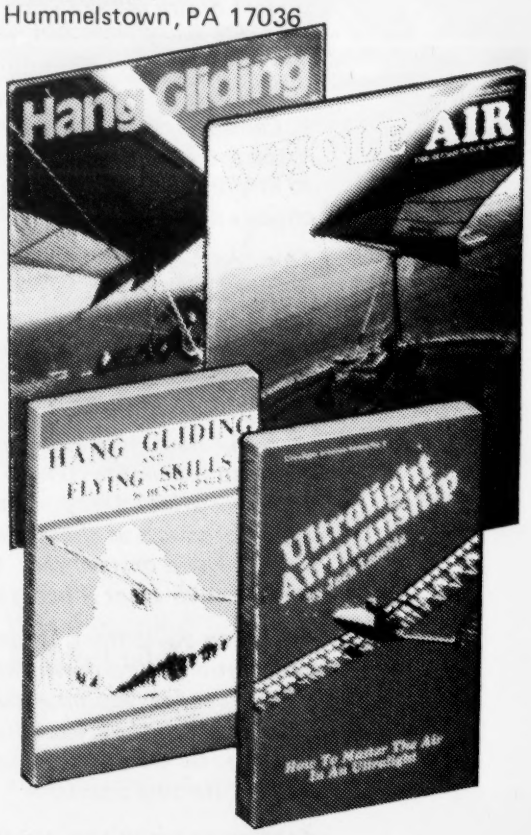
Hang Gliding and Flying Skills
Dennis Pagen
1977, 1982 2nd Edition;
110 pp.

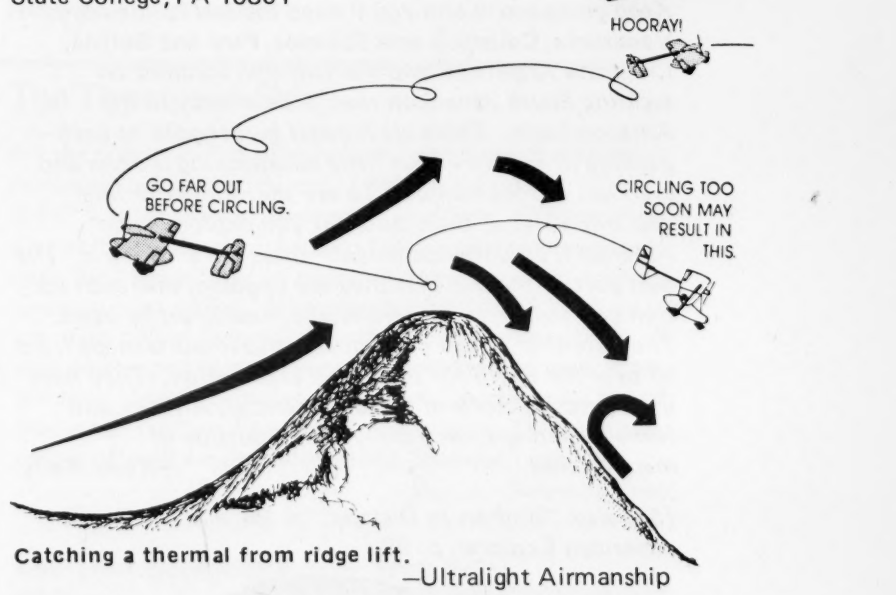
Hang Gliding for Advanced Pilots
Dennis Pagen
1978, 113 pp.

Flying Conditions
Dennis Pagen
1976, 1979 2nd Edition;
114 pp.

Each **$7.55**
postpaid from:
Dennis Pagen
P.O. Box 601
State College, PA 16801

Ultralight Airmanship
Jack Lambie
1981; 142 pp.
$17.90 postpaid from:
Ultralight Publications
Ultralight Way
P.O. Box 234
Hummelstown, PA 17036





Catching a thermal from ridge lift.

—Ultralight Airmanship

How to Get to the Wilderness Without a Car

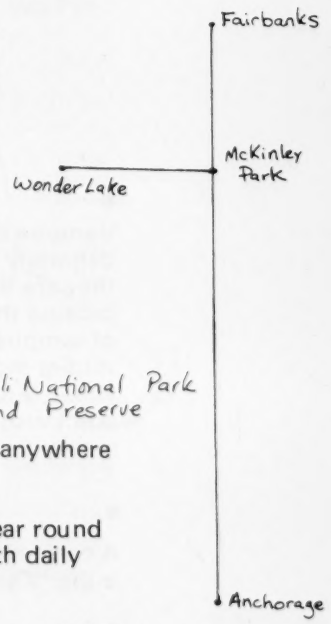
Did it ever bother you to drive 700 miles so you could walk 20? It should. It bothered Lee Cooper enough that he did something about it. Found out where buses would come within three miles of a wilderness trail head, disembarked, and glided into the bush. Kept track of his travels, researched some others, and now offers a bookful. He shows you rough sketches of the connections, but no fares or time schedules because they change. He's covered the popular parks of the West, leaving the part east of the Rockies undone for us to fill in on our own. This is the start of something awfully healthy. —Kevin Kelly

●

Denali National Park and Preserve: During Mt. McKinley's summer season, it is one of the few parks to actively encourage public transportation. Free shuttle buses take park visitors along the length of the park's only road, stopping to view wildlife and North America's highest mountain. Provided one has the necessary backcountry permit, it is possible to undertake overnight hikes from almost anywhere along the road.

The Alaska Railroad provides transportation year round to the park from Anchorage and Fairbanks, with daily service in the summer.

How to Get to the Wilderness Without a Car
Lee W. Cooper
1982; 196 pp.
$7.95 postpaid from:
Lee W. Cooper
P.O. Box 80584
Fairbanks, AL 99708



Bradt's back-country guides to Latin America

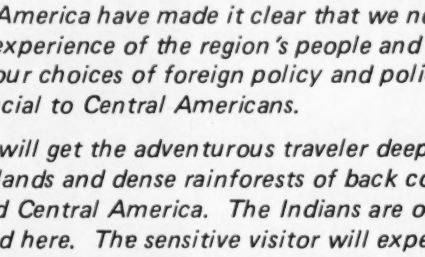
Very few of the many young North Americans who travel to Mexico and Central America get off the streets and onto the network of living trails that are the circulatory system of the inhabited back country. I used to think that this was just as well, that the Indians could do without the intrusion of footloose strangers and the inevitable awkward cross-cultural misunderstandings. Recent events in Central America have made it clear that we need more first-hand experience of the region's people and problems to inform our choices of foreign policy and policy makers, choices crucial to Central Americans.

This book will get the adventurous traveler deep into the misty highlands and dense rainforests of back country Mexico and Central America. The Indians are on their own ground here. The sensitive visitor will experience a rhythm and texture in their lives in the hills which is only hinted at in the market towns ordinarily visited by tourists. Rainforests and cloudforests, as exotic as the moon to temperate-climate people, are also accessible with this guide. Our consumption of such rainforest region products as cheap beef and pulpwood contributes to their rapid destruction. Perhaps we ought to become familiar with what is being sacrificed.

Advice on equipment, information on map sources, health information, hand-drawn trail maps, and day-by-day trail guides for recommended hikes in Mexico, Guatemala, El Salvador, Honduras, Costa Rica, and Panama are given. Their routes are a bit too goal-oriented for me. I use the them as starting points. —*Bret Blosser*

Keep going south and you'll need the rest of the series: **Venezuela, Colombia and Ecuador, Peru and Bolivia, Chile and Argentina,** *and the two thin volumes on tackling South American river trips, mostly in the Amazon basin. These are modest guidebooks to backpacking in an area where little backpacking is done and even less is documented. To say that sooner or later you will arrive at these books if you explore Latin America is an understatement: these are all there is. The best part of them is that they are ongoing, that each edition gets better, more wholesome, nourished by users. The publisher, Bradt Enterprises, also imports maps from all over the world for travel and exploration. They have an impressive stock of South American, African, and Himalayan maps not usually found outside of map libraries.* —*Kevin Kelly*

[See also "Mothers in Distress," p. 26, and the **South American Explorer,** *p. 90.]*



Vampire bat

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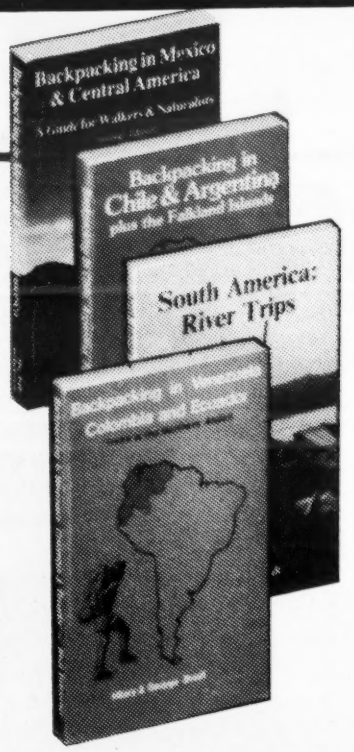
Vampire Bat. These rather endearing little creatures are definitely dangerous because of all the animals listed here they are the only ones to actively seek you as a prey, and because they're carriers of rabies. However, the dangers of vampire bats have been exaggerated, since recent studies show that only one in 200 carries the rabies virus. But with a disease that is invariably fatal, you don't want to take any risks, so always sleep under a mosquito net.

—**Backpacking in Mexico and Central America**

•

A perennial problem for backpackers in Central America is the *"Cerquita"* response. When you ask how far it is to the next village it is always, "very near," or in other words, *"cerquita."* Invariably you walk on and on, sometimes for two or three hours. Such people have little concept of measured distance (what do they need with kilometres?) or time, since few have watches. In a remote region of Mexico the inhabitants weave straw hats as they walk between villages. Asked how far it was to the next village, the hatmaker thought, then said, *"tres sombreros"* or three hats away.

—**Backpacking in Mexico and Central America**



Backpacking in Mexico and Central America
Hilary Bradt and Rob Rachowiecki
1982; 247 pp.
$10.45 postpaid

Backpacking in Chile and Argentina
$8.45 postpaid

South America: River Trips Vol. 1
$9.45 postpaid

Vol. 2
$10.45 postpaid

Backpacking in Venezuela, Columbia and Ecuador
$8.45 postpaid

Backpacking and Trekking in Peru and Bolivia
$9.45 postpaid

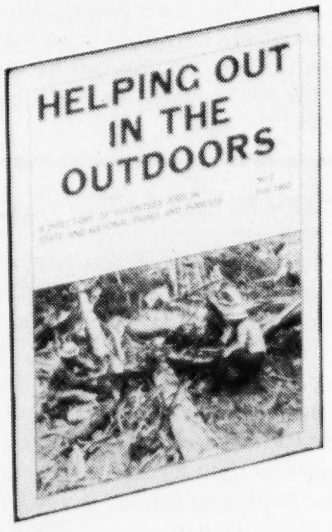
Catalog $.50 postpaid

all from:
Bradt Enterprises
95 Harvey Street
Cambridge, MA 02140

Helping Out in the Outdoors

When people volunteer everybody is winning. Needed jobs get done (cheerfully!), and the volunteers go home with more than they gave. Like to partake? Our parks could use your help. Wanted are fire lookouts, craft instructors, trail crews, campground hosts, surveyors, and tree planters. Experience accepted, willingness preferred. Some jobs pay no money, others furnish groceries or lodging or gas money, or work clothes, and some even pay meagerly. Look over this quarterly directory, decide who to give your love to, and write to them early. —*Kevin Kelly*

Helping Out in the Outdoors
(A Directory of Volunteer Jobs in State and National Forests)
$12/year (4 issues) from:
Signpost Trails Association
16812 36th Avenue West
Lynnwood, WA 98036



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Montana: Flathead National Forest, Swan Lake District — Trail workers. Help clear trails, cut brush, maintain trails in Mission Mountains Wilderness and Swan Range. Time period: June 1 to October 15. You will need heavy boots, warm clothing, and raingear. Room and board provided at the Condon Work Center in Condon, MT. In your free time explore the wilderness or enjoy the many opportunities the Swan Valley has to offer.

Kotatsu

We are a group of about 15 people, mostly Japanese, living as a community on land surrounded by Mendocino National Forest. We find more and more things from traditional Japanese culture — the rural ways of living more than the fancy Shogun trips — which make sense for us. Among these is Kotatsu, a practice so simple that we can't believe how we have missed it our last three winters. It is very common in Japanese winters.

Kotatsu is basically an arrangement of a container full of hot charcoal beneath a table, with blankets and (sometimes) a second table top on the table. People sit with their lower bodies under the blankets. Traditionally the Japanese use charcoal, but nowadays they use electric Kotatsu. For us backward wood burners Kotatsu can reduce firewood consumption by one-half to two-thirds. The reason is it heats only where heat is necessary and most effective — your hands and feet. You can't possibly conceive how effective it is to warm your lower body unless you've experienced it. It is like a dry hot tub. The ambient temperature in the room can be considerably lower than before, so you don't need to burn as much wood. However, you ain't cold. You are perspiring! It brings people close together in a small circle and it's so cozy, you can't get out of it! Now we only use our woodstoves for cooking and making charcoal. —Prabuddha
Elk Valley Folks

Since Prabuddha wrote this, the Elk Valley Folks (Simple Living Foundation) have begun handcrafting Kotatsu tables and blankets. You can get electric Kotatsu tables from Soko Hardware. The most cost-effective method is to design and build your own. —Art Kleiner

DON RYAN

Testing Soko Hardware's Kotatsu table at the CQ office.

Electric Kotatsu tables
$185 plus shipping (not including blanket) from:
Soko Hardware
1698 Post Street
San Francisco, CA 94115

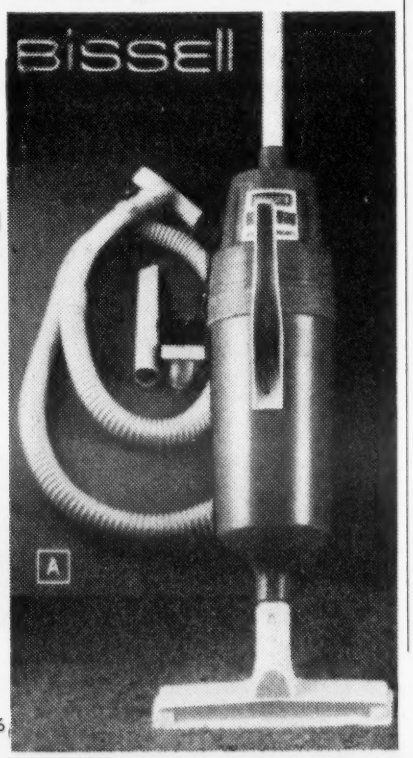
Wood-burning Kotatsu tables
Catalog **$1** from:
Simple Living Foundation
P.O. Box 968
Upper Lake, CA 95485

Bissell Multi-Vac electric broom

Years ago I got a Regina electric broom and was delighted with how quick and convenient its use was compared with the awkwardness of a vacuum cleaner. Unfortunately, my joy was dampened after a few weeks. Though I was careful with it, the Regina's suction power was clearly declining and with it the ease and efficiency of cleaning. The fact that the vacuumed dirt first passed the rotary blades and motor before it was collected in the dirt chamber seemed very unfortunate to me.

After going through three Reginas I found an electric broom with a far superior design. The Bissell Multi-Vac Dyna-Clean Vacuum collects the dirt before the air passes shielded motor and blades. After two years of service it works just as beautifully for me as ever. —Hanni Raillard

Bissell Multi-Vac Vacuum
$60 (approx.)
Nearest dealer location free from:
Bissell, Inc.
Grand Rapids, MI 49501



The Thompson Shirt

It's the only non-T-shirt shirt in my wardrobe that starts conversations with strangers. ("Where did you get that shirt?") It looks good, feels good, and lasts. The combination of loose sleeves with heavy 100 percent cotton gives a look (and capability) of sword-fighting potential with no undercurrent of fop. Nice wooden buttons, nice short stand-up collar, long tail suitable tucked or untucked. If you wear it out in two years, it's because you wear it all the time, which it invites. Part of the secret is the superb mail-order custom fit. Very rapid service. Of the ten colors offered I most recommend "natural" (white).
—Stewart Brand

The Thompson Shirt
$57 postpaid
Information and order form

free from:
Thompson Clothiers
Box 340
Valley Ford, CA 94972

Dress Better for Less

When I first started buying used clothing, I believed that anything that was cheap was therefore a bargain. Over the years I have learned to discriminate, and I do find real bargains now. If I had had **Dress Better for Less** *years ago, I could have saved even more money. In this book are guides for assessing your existing wardrobe to determine what you need, what you want, and what you want to look like. There are guides for judging the quality of used clothing — whether it can be altered or cleaned to become useful, and whether it will be suitable for your needs. A bargain shopping directory is included listing possible sources and appropriate tactics to use when shopping. There's even a listing by city and state which tells whether the store or outlet is resale, thrift, etc. Bargain shopping is fun and satisfying, and with this book to help you, it can be intelligent as well.*

—Evelyn Eldridge-Diaz

Dress Better for Less
Vicki Audette
1981; 185 pp.
$5.75 postpaid from:
Meadowbrook Press
18318 Minnetonka Blvd.
Deephaven, MN 55391
or Whole Earth Bookstore

•

The samples that clothing manufacturers' sales representatives show to the retail stores are often sold later in garage sales at the salesmen's homes. You can shop a salesman's sample garage sale and find clothes that have never been worn, at second-hand prices.

How to find one: watch your newspaper's classified ads (*Miscellaneous Sales*). The ads will read "salesman's sample sale" (and then list what's being sold).

Fads that Have Remained Fashionable

Bikinis
Jeans
T-shirts
Loafers (tassel and penny)
Short dress boots for men
Tennis shoes
Peasant blouses and skirts
Navy pea coats
Leather bomber jackets
Down-filled vests

Fads that Have Come and Gone

Women's padded shoulder suits
Bobby sox and saddle shoes
Poodle skirts with crinolines
Tent dresses
Pill-box hats
Pedal pushers
Mini-skirts
Maxi-coats
Tight white vinyl boots
Stacked platform shoes
Nehru jackets

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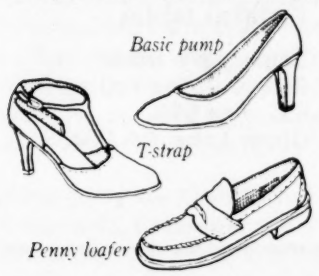
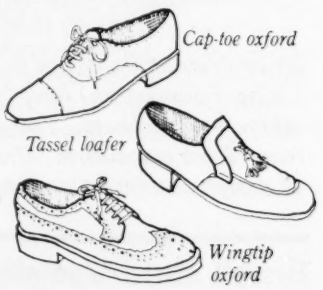
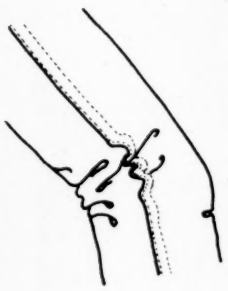
Magnet: A great help in determining whether an item is brass, gold or copper. If the magnet does *not* adhere to the item, it's not made of cheap metal. It's probably what it looks like — either brass, gold, or copper.



← Classic women's shoes: leather basic pumps with a medium heel, penny loafers, t-straps.

Classic men's shoes: wingtip oxfords, cap-toe oxfords, penny loafers, tassel loafers. →





Look for flat-felled seams on jeans, work clothes and children's play clothes (this is a seam with two rows of stitching showing on the outside of clothes). A flat-felled seam is more durable than a plain seam.

Bartender Shoes

What the world needs now is dignified running shoes.

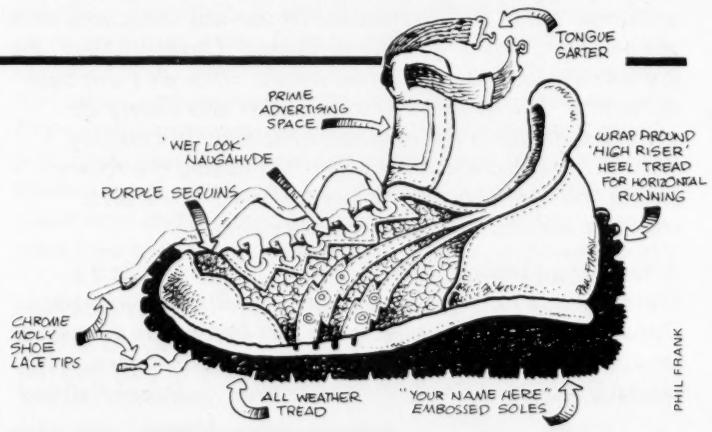
No racing stripes, da-glo swirls, hi-viz brand names, fins, wings, or split-level terraces. Just a shoe, please, with feathery lightness, tough construction, sensurround padding, and built-in fleetness — all the best from current running-shoe technology. One harmonious color— gray, black, or brown — and go easy on the laces.

Such a shoe would capture the world. Scan down the bodies of your friends: sensible blouse/shirt, sensible pants/skirt, hilarious running shoes. Everybody is wearing running shoes all the time. The dolts who market the silly things apparently imagine that people want their feet to announce, "I'd rather be running." Wrong. People want their feet to be comfortable.

Well. The shoe we all want doesn't exist yet, but there is one sincere gesture in its direction from Adidas. It's the Adidas referee shoe (officially called the "Official"). They are black, leather, extremely light (about 19 ounces, a good third of a pound lighter than standard oxfords), with small external labels that could be dyed out. They're not full-bore running-shoe technology, but they are a serious sport shoe. They cost around $50. They're too lacey for dress; not bad for casual. Upkeep is minimal — they're almost impossible to scuff.

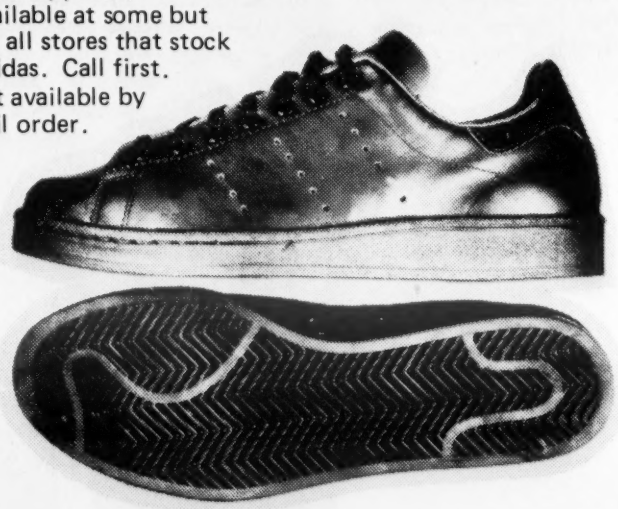
Who else buys these basic black Adidas besides referees? According to the salesmen, they are highly popular with bartenders, waiters, and mailmen — professional standers and walkers. As an amateur stander and walker, that's good enough for me.

—Stewart Brand



NORMAL RUNNING SHOE

Adidas Officials
$50 (approx.)
Available at some but not all stores that stock Adidas. Call first.
Not available by mail order.



French Creek Sheep and Wool Company

French Creek is an excellent source of high quality, high-priced, uptown warm clothes. Their Shearling is home grown and of better, i.e., thicker, quality than Antartex's, and their styling is much better. They have assorted coats and jackets for men and women, and also a very wide selection of thick, warm sweaters of all sorts of materials: Swiss cotton, flax, silk, cashmere, alpaca, and their own greasewools. They also have a limited selection of other clothes as well as accessories. For one of their fine coats you can expect to spend from $350 to $1600, with most falling in the $725 range. A lot of money for a coat, but it will last 30 years. —*J.M. Gaffney II*

French Creek Sheep and Wool Company
Catalog

$2 from:
French Creek Sheep
and Wool Company
RD No. 1
Elverson, PA 19520

The Trail **was last year's absolute best seller by a country mile . . . and would have been even better if we had had a ladies' version judging by all the requests. Ladies, here it is! The** Trail**, whether men's or ladies' is the perfect length for riding or driving. The full shawl collar turns up and stays up. The "bleeding" fleece seams are authentic ranch style . . . even on Madison Avenue. Dapple only. Ladies': $375. Men's: $385.**

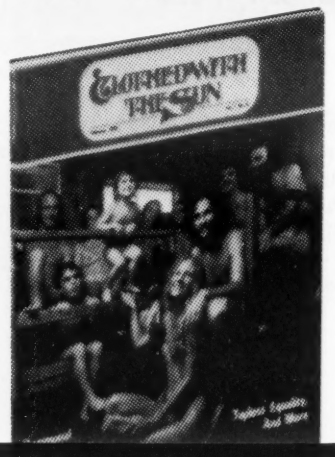
Clothed with the Sun

This happened in July of 1975: A young couple were driving up California's hot Central Valley on their way from San Diego to Oregon. The temperature had hovered around a hundred degrees most of the day and by ten p.m. wasn't getting much cooler. They decided they needed a beer and headed west into Chico. The first open bar they hit was the Western, an old hangarlike building next to the Southern Pacific railroad tracks. They walked in the front door and found two dozen locals of both sexes shooting pool and drinking cheap beer — and all of 'em were buck naked. Most had spent the day on the Sacramento River in full summer uniform — baseball hat, tennis shoes, sunglasses, period — and hadn't seen the point of suiting up further. The folks from San Diego didn't have much choice. They dropped their clothes at the door and ordered up the first of many pitchers. They spent two weeks in Chico and never did make it to Oregon.

Stuff like that doesn't seem to happen much these days. It should. When I lived in the country one of my true joys was to spend days on end bare-assed naked, usually with a group of friends. Sometimes some of the folks I worked with would just head on up to Butte Creek after work, step into God's wardrobe, and hit the water. I think it helped us work together better; it certainly cut away a lot of the pretension that can build up in work situations. And corny as it might sound, leaving your clothes behind does foster a kind of environmental awareness — you're one step closer to good ol' Mother Earth. It's hard to take yourself too seriously when your privates have gone public.

Things seem to be getting tighter — uptighter — these days, and that's where people like the Naturists come in. Quarterly, they present the news, politics, how to, and where to of social declothing. **Clothed with the Sun** *is comprehensive, enthusiastic, generously graphic, and in some ways even better than their book,* **World Guide to Nude Beaches** *(***NWEC** *2nd Edition p. 402): "Where" is the last step, "right attitude" the first.* **CWS** *is doing its legitimate best to foster right attitude. As they say, a full body tan is a sign of true wealth.* —*Joe Kane*
[Suggested by Bob Murphy]

Clothed with the Sun
Lee Baxandall, Editor
$15/year (4 issues)
from:
The Naturists
P.O. Box 132
Oshkosh, WI 54902



BOX 428 SAUSALITO CA 94966

Marchers on the steps of the State Capitol in Madison, Wisconsin. For comparison, a Madison ordinance of the 1890s read: "Bathers are required to wear full bathing dress covering the person from the neck to their knees."

How to repel mosquitoes

Research has proven that the mosquito, being almost blind, locates its prey (us) mostly by smell. My buddy Ragnar and i, while out working in the midst of a mountain mosquito bloom, decided to use subversion on the little guys. We hung up a pair of very ripe work pants (worn four days) on a bush and rubbed ourselves with garlic. The little beggars were all over the britches and let us be. Since then, i have started eating mosquitoes. Seriously. They don't taste at all, a bit salty maybe, if they're been sucking your blood, and i figure the digestive process destroys germs and breaks down mosquito-bodies to a point where your immune system can develop antibodies to the little blighters. It certainly helps my attitude towards them, and if their noses are so good, they can probably smell in my sweat that i'm insectivorous. (One mosquito to another: "Stay away from that one, man, he *eats* mosquitoes!")

Larry Evans
Missoula, Montana

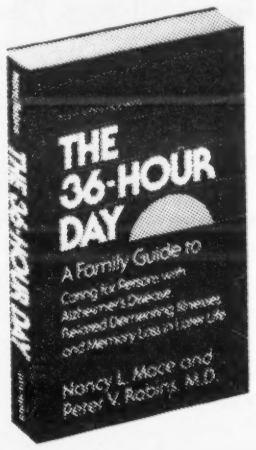
The 36-Hour Day

What many of us still call senility is actually several different brain-eroding diseases loosely grouped under the medical term dementia. The two most common are Alzheimer's disease, in which brain tissue deteriorates, and multi-infarct dementia, caused by a series of small strokes. There is no cure for either. Victims lose their memory, their ability to manage their lives, their emotional equilibrium, and their perception. Family relationships deteriorate too. More than five percent of people over 65 suffer from dementia (it can strike as early as 40), but until now there has been no book for the families who need to understand and take care of them. Here is the book. It does not gloss over the details of one of the cruelest types of diseases imaginable — loss of faculties. Its advice on home care is cogent. Its last chapter describes the fascinating but uncertain research done so far on medical cures.

I had not expected this book to touch me personally, but I suddenly recognized that my late grandmother's senility, which I'd always assumed was the natural effect of old age, was probably a symptom of multi-infarct dementia. Had we known, we could have comforted her more effectively than we did — and eased our own guilt and misunderstanding. *—Art Kleiner*

[Suggested by Karla Griffin of the Family Survival Project for Brain Damaged Adults]

The 36-Hour Day
(A Family Guide to Caring for Persons with Alzheimer's Disease, Related Dementing Illnesses, and Memory Loss in Later Life)
Nancy L. Mace and Peter V. Rabins, M.D.
1981; 262 pp.
$8.20 postpaid from:
Johns Hopkins University Press
Baltimore, MD 21218
or Whole Earth Bookstore



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A dementing illness brings about many kinds of losses. It means losing control over one's daily activities, losing independence, losing skills, and losing the ability to do those things that make one feel useful or important. A dementing illness limits the possibilities the future can hold. While others can look forward to things getting better, the ill person must gradually realize that her future is limited. Perhaps the most terrible loss of all is the loss of memory. Losing one's memories means losing one's day-to-day connections with others and with one's past. The far past may seem like the present. Without a memory of today or an understanding that the past is past, the future ceases to have meaning.

•

Mrs. Kravitz said to her husband, "Who are you? What are you doing in my house?"

This is not a problem of memory. Mrs. Kravitz had not forgotten her husband; in fact, she remembered him quite well, but her brain could not figure out who he was from what her eyes saw.

•

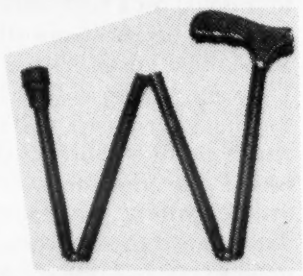
It is often comforting to touch the person physically, as long as she does not misinterpret your touch as an effort to restrain her. Say "I know you are so upset. Would it help if I held your hand (or gave you a hug)?"

Sears Home Health Care Catalog

If someone you care for (or someone you are) isn't getting around so spryly these days, here are the implements to lighten that burden. Adjustable beds and accessories, sickroom commodes, incontinence gear, hearing improvers, wheelchairs galore, walkers, bathroom accessories, exercise gear, clever arthritis implements, and easy-to-put-on clothes. Good stuff, good prices. We always have a copy at Uncommon Courtesy's "Home Care Training" courses (see p. 130). *—Stewart Brand*

Sears Home Health Care
Catalog
free from:
Sears Catalog Department
Los Angeles, CA 90051

On-Bed Tray. Construction: White wood frame has wicker-look side pockets for books, magazines, etc. Adjustable center section has white enameled top . . . wipes clean with a damp cloth. Use for reading, writing, eating in bed or chair. Measures 15x8x7½ inches high overall. $39.99



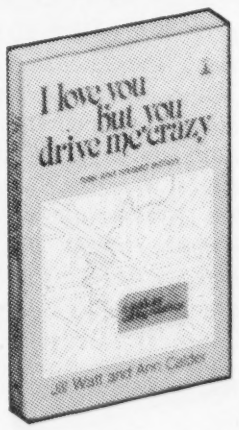
Folding Cane. Sturdy black anodized aluminum shaft, wood handle with carved contour grip. Black rubber grip. 4 telescope sections snap out automatically to 36-in. cane. Can be cut 3 in. with a hacksaw. Shock cord stretches to allow 4 sections to be pulled apart and folded to a compact 12-in. length for travel or storage in plastic case. $17.99

I Love You but You Drive Me Crazy

Anyone doing home care will need this book as a maintenance manual for those essential but easily burned-out tools — your spirit and good will. Having someone suddenly dependent on you doesn't have to be a nightmare if you follow the methods listed herein for learning to find help and making sure you've chosen to be a care-giver, not just had the role thrust on you. Read the book before you feel swallowed. Read it way before you start wondering if your care is doing your friend or relative any good. It's one of the most valued books at Planetree's medical library in San Francisco because it teaches how to give without giving yourself away. *—Art Kleiner*

[Suggested by Karla Griffin]

I Love You but You Drive Me Crazy
(A Guide for Caring Relatives)
Jill Watt and Ann Calder
1978, 1981, Second Edition; 152 pp.
$6.50 postpaid from:
Fforbez Communications
2133 Quebec Street
Vancouver, B.C.
Canada V5T 2Z9



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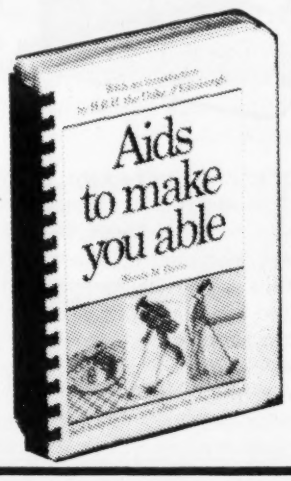
Care-givers often feel trapped. They tell each other in great detail about their problems, sometimes almost competing to see who is the most overworked and miserable. They may try to make better-organized care-givers feel guilty for wanting time for themselves. Our advice to you is: Don't waste time with these people. Seek out people, organizations, friends and family who can *help* you.

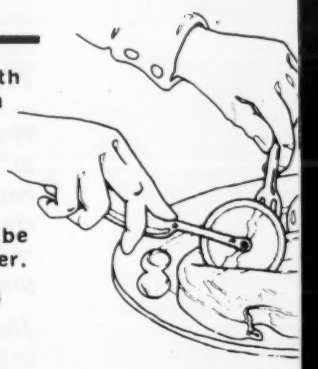
Aids to Make You Able

Aids to Make You Able *is a briskly written and well-illustrated guide to devices that can be used by disabled people. It also contains information on how disabled people can participate in such activities as carpentry, skiing and gardening. The back of the book has a bibliography and a listing of agencies and companies that help disabled people. This is a very useful book. —Mark O'Brien*

Aids to Make You Able
(Self-Help Devices and Ideas for the Disabled)
Wendy M. Davis
1981; 155 pp.
$9.95 postpaid from:
Beaufort Books
9 East 40th Street
New York, NY 10016
or Whole Earth Bookstore



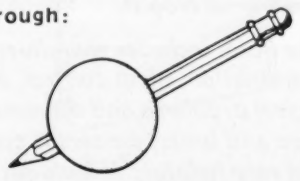
A Pizza Cutter has been found effective by persons with multiple sclerosis and other disabilities because it has a smooth roller movement.



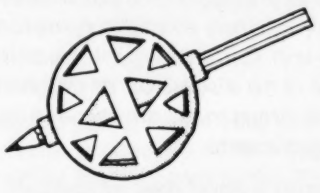
Grips for Pencils — A person with impaired grasp may be able to hold a pencil if it is attached to something larger.

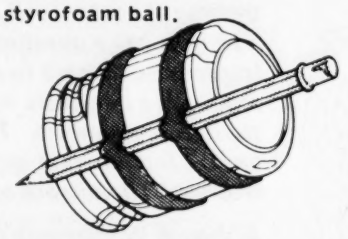
The pencil may be passed through:

A small sorbo rubber ball.



A lightweight plastic sports ball or styrofoam ball.





Two pen pocket-clips secured to a jar with two elastic bands. The pencil may be adjusted so the jar glides easily over the paper.

Nursing Home Life: What It Is and What It Could Be

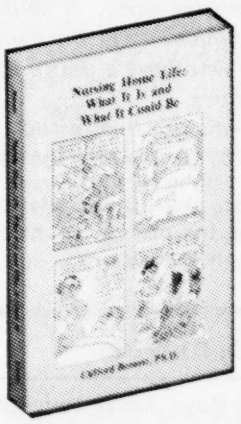
This is a practical how-to (and how-not-to) guide for people concerned with providing quality nursing home care, humanistically based, for the older disabled members of our society. Clifford Bennett brings his own experiences, both as a nursing-home administrator and patient, to bear on such matters as personal freedom, privacy, individuality, friendship, finances, religion, family, clothing, and food. He offers some examples of badly run homes for illustrative contrast, but instead of dwelling on what's wrong with many institutions, he provides ideas and tools for practical improvement: organizational charts, floor plans, specifics of day-to-day operations, efficient staff scheduling, and a rather extensive program for in-service training. One helpful section suggests what family members and friends can do for patients and what gifts they are most likely to welcome.

The book is full of cartoon drawings, illustrative anecdotes and personal experiences from Bennett's own time as a nursing-home patient. As future senior citizens, every one of us has a personal interest in what this book is all about. —*Richard Kirshman*
[Suggested by Tom Ferguson, M.D.]

•

One indication of the quality of the services delivered in a home is how the patients are dressed. If the residents have a daily change of outer clothing, if their garments are pressed, and if they look neat and clean, it is a fair assumption that an effort is being made to improve their well-being.

Nursing Home Life: What It Is and What It Could Be
Clifford Bennett, Ph.D.
1980; 201 pp.
$7.80 postpaid from:
The Tiresias Press
116 Pinehurst Avenue
New York, NY 10033



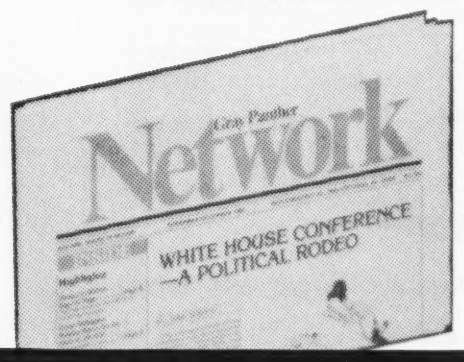
THE ADMITTANCE....

•

Now I realize that my possession policies were miniscule — just token expressions of goodwill. The magnitude of the patients' personal property deprivation is great and almost total. Patients want and need much more than I was giving them. As I sat among them and analyzed their plight, I could sense and empathize with their feelings after having left *all* of their worldly belongs behind them — furniture, sentimental artifacts, hanging pictures, plants, valuables such as jewelry, and most of their clothing.

Gray Panther Network

Maggie Kuhn started the Gray Panthers back in 1971 in Philadelphia as a senior-citizens' wing of the antiwar movement. The Panthers have since mushroomed into a highly political nationwide organization whose goal is, simply, "to make the world a better place to grow old in." Intentionally made up of both young and old people, the Panthers describe themselves as "intergenerational" — all generations working to build a culture in which the aged have a full share. **Network** *is their journal, and its 50,000 paid subscriptions attest to the seriousness of the movement. Old folks will find strength here; middle-agers and baby-boomers will witness a part of their future being built.* —*Joe Kane*



Gray Panther Network
Christina Long, Editor
$8/year (6 issues)
from:
Gray Panthers
3635 Chestnut Street
Philadelphia, PA 19104

•

The majority of older respondents (over age 50) to Shere Hite's survey on male sexuality enjoy sex *more* than they did as younger men. Many of the responses in *The Hite Report on Male Sexuality* included comments such as "Age, I have noticed, makes sex better and better"; "With age came understanding of myself and my lover's needs"; "At 36, it [sex] was good. At 46, it was great. At 56, it was the best. Now — over 60 — it's about the most important thing in my life."

Womancare

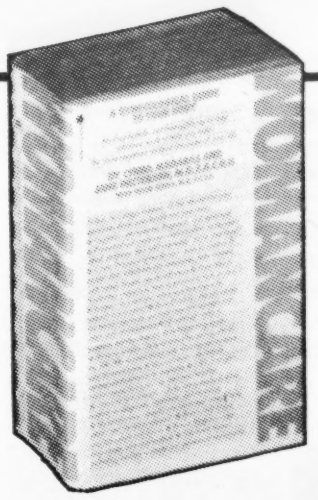
Womancare *is an encyclopedia of gynecological problems, sufficiently detailed and documented to be helpful to health workers and clear enough to be an excellent reference for the layperson. The authors encourage their readers to assume an equal relationship with their gynecologist.*

The book includes well-illustrated sections on self-examination, birth control, and the gamut of gynecological problems and diseases. The section on gynecologic and breast cancers is comprehensive, nonthreatening and very helpful; it includes lists of cancer-detection-and-treatment centers and oncologists for second opinions. If a woman has a question on any subject — from sexually transmitted disease to endometriosis to vague symptoms requiring a diagnosis — she will find intelligent presentations in **Womancare**. *There is no discussion of pregnancy, except for abortion, ectopic pregnancy, miscarriage and trophoblastic disease of the placenta.*

Although **Womancare** *contains a good deal of radical-feminist politics, coauthor Patterson is a successful gynecologist who operates within the medical-care system. The book is primarily disease oriented and pays less attention than other current women's health books to nutrition, stress management, exercise, psychology, sexuality, herbal medicine, acupuncture, self-healing and other alternative therapies. To be fair, however, it does mention these topics and does not downgrade them in the process. It also restates the prevailing position on the uselessness of the ovary after menopause, despite much recent evidence that it continues to secrete adrogenic hormones which enhance health and libido.*

With these minor reservations, I found **Womancare** *an excellent and amazingly comprehensive work. It belongs in doctors' offices and women's clinics and in the hands of clients with health problems who have a desire to understand and control their destinies.*

—Sadja Greenwood, M.D.
[Suggested by Tom Ferguson, M.D.]



Womancare
(A Gynecological Guide to Your Body)
Lynda Madaras and Jane Patterson, M.D., F.A.C.O.G.
1981; 938 pp.

$10.70 postpaid from:
Avon Books
959 Eighth Avenue
New York, NY 10019
or Whole Earth Bookstore

INFERTILE MUCUS

FERTILE MUCUS

Prior to ovulation the molecules of your cervical mucus have a cross-hatched pattern. During the most fertile part of your cycle, the molecules realign themselves, forming passageways to aid the sperm on their journey to the uterus.

●

By practicing self-exam, women can learn to detect abnormalities and seek treatment when diseases are most curable, in their earliest stages, before they become full blown illnesses. For example, a woman who practices self-exam is familiar with her own vaginal discharge and knows what is normal for her and can detect a vaginal infection (the most common gynecological problem, the chief symptom of which is an increase in vaginal discharge) right away, before the discharge is so copious that it leaks out onto her underclothes. . . . Not only can gynecological self-exam save you money, it can also change your whole attitude about your body and yourself and about doctors, medical care and your role in making health-care decisions.

●

It seems clear that hormone levels have some sort of relationship to breast cancer, but the relationship is not a straightforward one. Many doctors are therefore concerned about the widespread use of hormones in the form of birth control pills and estrogen replacement therapy used to treat menopausal problems. There is no evidence that women on birth control pills have higher rates of breast cancer, though the Pill has been widely used for only about ten years and breast cancers may take 15-20 years to develop. Moreover, even though evidence for hormones as a causative factor is controversial, we do know that estrogen, if not a seed, is at least a fertilizer, causing some existing cancers to accelerate their growth rate. For this reason many doctors are hesitant about prescribing oral contraceptives for women who are at high risk. Certainly women with a personal or family history of breast cancer should avoid use of any hormone medications unless specifically prescribed as part of their cancer treatment.

Not a butterfly; a whale, maybe

This is in response to William de Buys' letter concerning rapid eye movement (REM) sleep in animals ("Or Am I A Butterfly Dreaming I Am A Man?" Summer '82 **CQ**). It is taken from **Some Must Watch While Some Must Sleep** by William C. Dement (1978, W.H. Freeman and Company, San Francisco):

"Most reptiles appear to have non-REM sleep as we know it, but do not show any REM sleep at all. Birds have a very well developed non-REM sleep and show very brief (about one second) episodes of what appears to be an evolutionary precursor of the REM period. Full-blown REM periods exist only in mammalian sleep. Interestingly enough, all mammals appear to have substantial amounts of REM sleep, and whatever differences exist do not follow any apparent rule . . . . A few of the many species whose sleep has been carefully studied are elephant, chimpanzee, whale, shrew, pig, sheep, monkey, rat, mouse, cat, bat, dog, donkey, guinea pig, and human. Some non-mammals that have been observed by sleep researchers are frog, alligator, lizard, various fish, pigeon, chicken, eagle, and snake . . . .

"One of the most remarkable aspects of REM sleep is the very large amount that is present in most mammals immediately after birth. In the newborn human baby, who sleeps an average of sixteen to eighteen hours per day, fully 50 percent of all sleep (eight to nine hours!) is occupied by REM periods . . . .

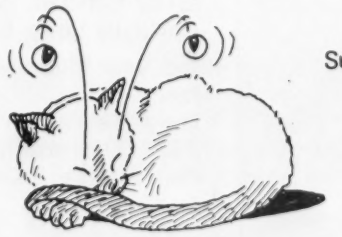
"In premature infants of thirty-two to thirty-six weeks gestation, the percent of REM sleep is even higher, around 75 percent. . . . This finding suggests that there is a phase in the early intrauterine life of the child when REM sleep is the all-encompassing mode of existence . . . .

"In some animals the predominance of REM sleep in early life is even more spectacular. For example, in the newborn kitten, REM sleep is the only sleep. This is also true of the newborn puppy, rat and hamster. On the other hand, the newborn guinea pig has very little REM sleep.

"Because of the extraordinary amount of REM sleep in infants, and our difficulty in demonstrating the purpose of REM sleep in adults, we cannot help wondering if the real function of REM sleep is fulfilled early in life. Perhaps REM sleep is necessary for the normal pre- and post-natal maturation of the brain. This fits with the guinea pig data because that animal is mature at birth."

James Whelan
Sussex, New Jersey

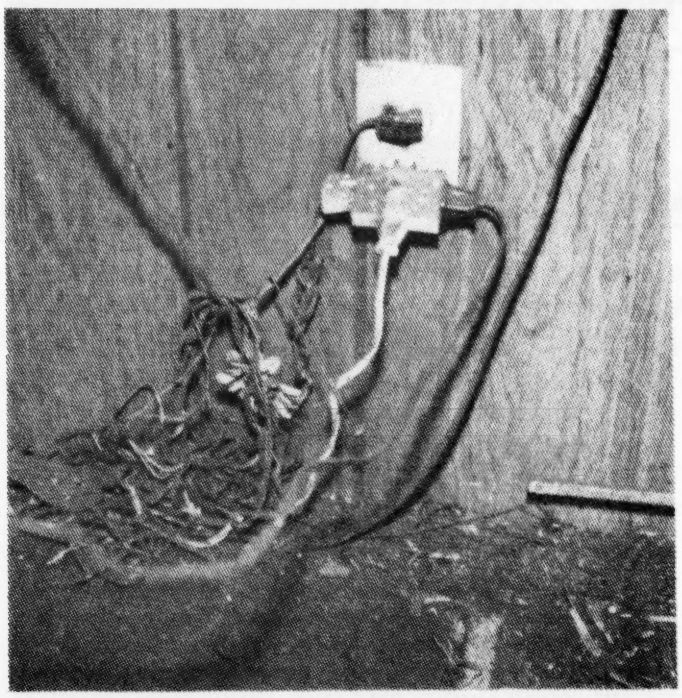
JAY KINNEY



Don't Get Burned!

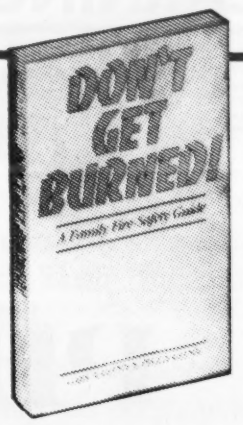
Six years ago I accidentally started a fire in my kitchen, which my roommate and I had to jump through to escape. I learned how dangerous flammable chemicals can be and how flesh melts like wax. If someone had made me sit down with a competent fire-safety book, my roommate and I might have avoided hours of pain and months of healing. I've looked for such a book ever since, and this is the best I've seen for urbanites and suburbanites. It's comprehensive and so simply written that some might see it as patronizing. I see it as useful. Every public library should display one prominently for browsing.

—Art Kleiner



In the fire service, the ordinary brown or white 2-wire extension cord that's available everywhere is referred to as the "79 cent killer" (inflated now to $1.59 at least). The "killer" is designed to carry a light current load for short periods of time. For example, if you're planning to run a television, table lamp, fish aquarium, and stereo from a 3-outlet, 2-wire "killer," you're courting trouble.

Don't Get Burned!
(A Family Fire-Safety Guide)
Gary A. Glenn and
Peggy Glenn
1982; 215 pp.
$8.80 postpaid from:
Aames-Allen Publishing
Company
924 Main Street
Huntington Beach, CA 92648
or Whole Earth
Bookstore



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Once the frying pan and contents are on fire what do you do next? Too many people think that the best action is to move it to the sink and pour it down the drain. Wrong! Moving a burning frying pan even an inch is extremely dangerous.

First, the pan is hot — very hot — and difficult to hold, even with protective mitts. Second, in moving the pan, increased air flow makes the fire flare. Third, the natural reaction to a flaring fire is to jump or draw back in fear. This causes the liquid to shift, slosh and spill. As the flame gets higher or the liquid spills over onto the floor or counter, or spreads to curtains or cabinets, you've got a bigger fire.

Big fires are hard to fight. The smartest thing you can do is to smother the fire right where it is. The most effective way to do this is by using a tight-fitting pan lid. You can also use a cookie sheet, a handful of baking soda, or a chemical fire extinguisher. Even a dampened cloth or towel can be used to smother the fire if nothing else is close at hand.

•

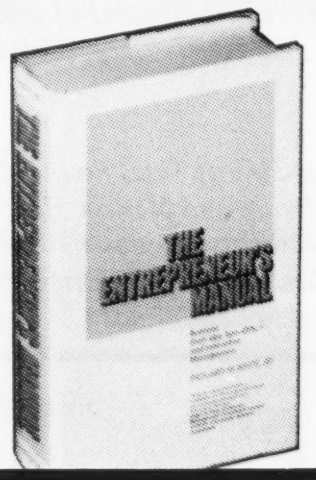
Skin continues to "cook" after it is burned, just like a piece of meat. Cool the burn immediately with standing tap water or a very gentle dribble from a hose or by jumping into a swimming pool if one is handy. Do not pack in ice, rub with ice, or stick under a wildly running faucet. Cool the burn as soon as it happens.

P.S. This also works to ease the progression of sunburn. How many times have you remarked that your sunburn is worse in the morning than it was when you went to bed and "cooked" some more? By sitting in a tub of cool water, you can ease the pain of a sunburn.

The Entrepreneur's Manual

If you are thinking of joining the capitalist system, or if you want to get a better inside view, this book might prove invaluable. Written by an experienced business consultant with editorial assistance from 20 other business consultants, it distills an entire approach to business into a very readable and organized manual that complements more philosophically oriented books by being as hard-nosed as they come. Though the author doesn't say it this way, the book is really a whole-systems approach to starting and running a business. Everything from developing a business plan to organizing sales-distribution networks is touched on. Even though I can't agree with all the assumptions used and tactics advocated, I'd have to say it is the most useful "how-to" I have run across on how to operate America as you find it. —*Shel Kaphan*

The Entrepreneur's Manual
Richard M. White, Jr.
1977; 419 pp.
$17.50 postpaid from:
Chilton Book Company
Chilton Way
Radnor, PA 19089
or Whole Earth
Bookstore



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When you "bomb" prices to gain a larger percentage of the market, all that you are doing is admitting that you do not understand either sales or business and in trying to "buy" sales, you spoil your nest. Your prime concern is not how to penetrate the market but rather how to keep your competition from ruining the industry by dropping its prices in reaction to your sales penetrations. Do not even make it a minor objective to beat your competition in sales. Make it a major objective to realize sales and profits through giving the customer what he wants. If you are mature, you'll realize that you are starting-up your own company which will be a vehicle to allow you to meet your life's objectives . . . not a vehicle to destroy competitors. There is plenty of room for many profit-oriented companies in each industry.

•

Some idiot at sometime must have said that you cannot receive both friendship and respect at the same time from the same person, and we all bought this hackneyed notion as an axiom. Believe me, respect and friendship aren't disharmonious. When you select co-founders, select only those who will mutually like and respect each other. This is important because to get the effort that your company requires, everyone must make a dedicated commitment to see the jobs through. The work atmosphere must be free of conflicts. It will never come off without the mutual respect and warmth of all team members.

CREATIVE PHILANTHROPY

VOICES FROM AN UNCOMMON COURTESY CONFERENCE, AUGUST 1982

My big worry was they would balk at doing the dishes. Here come 27 rich people, some very rich (over $10 million assets is very to me), and we're putting them up for the weekend in a bunkhouse, feeding them teenager food (Yosemite Institute mostly does environmental programs for kids), and requiring them to help with dishes and clean-up. And charging $250 for the privilege.

So much for class preconceptions. They practically took over the kitchen, scrubbed and swept like professionals, and claimed it was the best conference food they'd had. They met from eight in the morning to eleven at night and caucused and schemed and hustled each other for various causes every minute in between.

The invitation they had responded to said:

The purpose is to markedly increase originality and responsibility in personal philanthropy. The approach is to pool the experience and insight of an unusually wide range of philanthropic talent.

There are signs of a major shift coming in the style, content, and import of American private giving – signs that the givers are intent on doing more good, less harm, and having more fun with their money. They are taking greater risks with their grants, getting more personally involved, and learning more. By financially encouraging pioneers in new ways they are becoming pioneers themselves.

This meeting is to chronicle some of that experience and accelerate it further by helping clarify which of the new (as well as old) methods of granting are working best. This means approaching the body of experience with some rigor, as if the conferees were preparing a technical manual of optimally adventurous and effective giving.

Who responded? The majority were young heirs and heiresses (early 20s to late 30s), then came foundation professionals with backgrounds ranging from international socialite to ex-convict, and assorted indescribables. An elite, in fact, that used the weekend to become more so. ("Elite" in my book means good rather than separatist.)

There is one separatist element of wealth which this report will carefully protect. As Drummond Pike put it, "You're either anonymous or you're not. There's no halfway." So there are no photos and few names here, to protect the freedom and sanity and creative options of the philanthropists. What is here is their voices – ideas and characters transmitting and transmuting, projected out of their private context onto your public retina.

Some of the foundation types can be named. Drummond Pike of Tides Foundation. Michael Phillips of Glide. John Maher, founder of Delancey Street. Bob Fuller and Marlow Hotchkiss of the Mo Tzu Project. Circuit rider John Steiner. The 20 hours of tape were transcribed/edited by myself and **Christian Science Monitor** *writer Stewart McBride. For the inevitable errors and indiscretions I am responsible.*

–Stewart Brand

ONE OF THE SADDEST creatures on God's Earth is a guilty wealthy person. One of the noblest creatures is a really proud rich person – who's doing something to be proud of (there are some who are proud and it's strictly their own idea).

THE ACTUAL AMOUNT of financial impact that comes from individual philanthropy is probably not as great as the fact that it can be more original than other kinds. What originality does for a culture is make it resilient, widen its range.

•

MONEY TENDS TO ALIENATE and isolate. I'm here particularly because I'm interested in the power of collective philanthropy; which I think we've only begun to touch.

•

I HAVE ABOUT $10 MILLION inherited wealth. I see that as the way my dad has given his heart to me, though it's come in a lot of other ways as well.

•

MY MAJOR PROJECT is Kezar Stadium in San Francisco. It's an old football stadium that just sits there, used very infrequently in the last six years. I'm spearheading a drive to purchase the stadium, renovate it, and turn it over under the auspices of a community foundation to put on benefit events, festivals, and other ways of generating income for community programs, art programs, etc.

•

A FRIEND OF MINE said "Meet this fellow." I wasn't particularly interested, but I did. He was a charismatic fellow. The next thing I knew I was the chairman of the board for a school of circus arts for inner-city kids. It was one of the nicest things I've done with my life, because it was the nuttiest.

•

I WAS BORN RICH, raised by a butler and maid. The old man died and the will was in probate for ten years. I learned to be a machinist. Then I got it all.

I'm interested in low-impact high technology and high-impact low technology. I'm in love with the nineteenth century and the twenty-first century and I'm not really fond of the twentieth century.

•

I REALIZED THAT SURVIVAL is somehow hierarchical, a ladder. The first rung, the personal survival that most folks have to work at, had been handled for me, so I was privileged to look at rungs number two or three on that ladder, which is other kinds of survival. Now I'm in the place of looking at planetary survival. If we pooled all the money in this room, we just wouldn't have enough to pick up the tab for peace on Earth. We need to generate more to pay the bill.

Coming to grips with money for me became a process of coming to grips with what was the purpose of my life, what was the purpose of life at all.

I gave away a whole lot of money over the last ten years, usually more than I made each year. I dipped into capital. My advisors called it "ATTACKING! principal."

•

I SAID I WOULDN'T TAKE THE JOB as college president unless the board would give me $100,000 in my desk drawer to give away as I saw fit to people who needed it in the college. That would range from a winter coat for somebody to college tuition for somebody. It just made the place livable. It was like lubricant which could make the institution work when there was some money that could go out of channels. That's a way *you* can lubricate the world.

•

HERE'S A SUCCESS STORY. When I was growing up it was very common for the son of a rabbi to have Roman Catholics come over and say "The Jews killed Christ" – and be angry at me for that. The B'nai B'rith in 1961 gave an initial grant of a quarter of a million dollars to Charlie Gluck of the Survey Research Center in Berkeley (Charlie went back until the grant was over $800,000) to study antisemitism in America. He finished the study, and it showed in several hierarchical and interesting ways the degree to which antisemitism was related to the Catholic church's training. He demonstrated the same thing with other non-Catholic Christian churches.

$800,000 had been spent on this one unpublished volume of about 75 pages. Charlie made a couple of copies and went and visited a cardinal in Chicago, a cardinal in New York, and two other bishops in the United States, gave them the report, and asked them to take it with them to Pope John's First Ecumenical Council in Rome. He shipped off I think another 25 copies, and out of that came a change in the Catholic Church's position to one that the Jews did not kill Christ. It has never been taught in the Catholic Church since then. An astounding change.

•

SOMEDAY I WOULD LOVE to get an article for **CoEvolution** called "Foundation Manners."

•

THERE WAS AN EXPERIMENT I did that relates to foundations. The Haight Ashbury Switch-

board was a member of the Briarpatch Network, and they called us up and asked for advice on getting a grant. It was the most hang-loose operation imaginable, but it was wonderful. It had been operating by then at least ten years. I asked if they had ever applied for a grant. They went through their drawers and found an old grant application. I told them not to change anything in it, just make ten copies and mail it to the ten leading foundations in San Francisco, and do that for three years. Don't change anything each year, just the date. And at the end of the third year, they got their grant.

The lesson is, foundations only give to established organizations. Proof that you're established is that your file goes back three years.

A: I wonder. Do you have a philosophy when you give out money or do you just do it off the top?

B: [Silence.]

C: With Point Foundation Stewart suggested, and the board agreed, that each of the six board members would write a personal statement of objectives. That was 1972. I'm still going back to the statement I wrote. They were one of the best things we did.

•

I THINK THE MOST SATISFYING work I've done is help dear friends who were in trouble – because of physical disability, mental and emotional disability, financial disability. The assumption being that it would be a period of time they would have to go through and they would get over it. The stretch was when those periods of time lasted three to five times longer than I thought they would. But in every single situation that person has come out whole and able to make their own way.

That has led into giving money to friends who are putting a project together and need a period of time – when they're not going to get money from anybody else. Again it's often more money than I expected, but again in almost every situation it works. In a way I can never lose, because they're people I care about in the beginning. Money is the vehicle but it's not the issue.

•

BUCKMINSTER FULLER TOLD ME, "I know about money. It's exactly the same as the left-hand rule of physics.* All the forces are orthogonal. If you were on the Moon looking in the direction of the Moon's orbit, you would see where the Moon is going. That's what most people do. But the reality is the Moon is going where it's going because of the relationship it has with the Earth – the orbit is the consequence. You look for the Earth way over at right angles to the orbit. Money is the orbit. Everybody pays attention to it, but it is the consequence of other relationships."

WHEN YOU GIVE MONEY you have to be careful what you've perceived as rewarding, because that's what will be repeated.

•

THE NOTION OF THE PATRON is someone who will protect a new world-view long enough for it to take effect.

•

ONE THING WE DID with Point was we only gave money to friends, or if they weren't friends yet they were supposed to become friends. In part this was to replace the paper – reports and so on. It also worked because the members of the board were chosen because they were "godfathers." They ran potent networks, so their friends tended to be up to something interesting.

SAMUEL BUTLER ONCE WROTE, "The gods are those who either have money or don't want it." There's all sorts of pressures in society to eliminate both those groups.

A. Some grants are an equal sharing. You may have better ideas and I may have a little more energy on the green side.

B. I'm sorry, but I have a red button when the term "money-energy" is used. Money is not energy. There's no number I could write in a checkbook that's going to diminish the amount of energy I have. It may change some of my priorities. Money is also not power, since we've had many wealthy people who had no power over anything, including their own lives. My view is that money's exactly like the words I'm using this minute. It's exactly analogous to language.

•

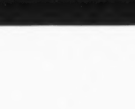
MONEY IS A MEDIUM of exchange. The operable word is *exchange*. It is not possible in Robert Frost's terms to make a "gift outright." There is always an exchange. Often it is unacknowledged, unconscious, or unexpected, but it's there.

***left-hand rule** [ELECTROMAG] **2.** For a current-carrying wire in a magnetic field, such as a wire on the armature of a motor, the rule that if the thumb, first, and second fingers of the left hand are extended at right angles to one another, with the first finger representing the direction of magnetic lines of force and the second finger representing the direction of current flow, the thumb will be pointing in the direction of force on the wire. Also known as Fleming's rule.

–McGraw-Hill Dictionary of Scientific and Technical Terms

A friend of mine who's a sailor has a Cousteau poster in his office of a whale leaping out of the water. One time he sent a $10,000 check to the Cousteau Society. He had a tremendous flush of excitement, writing that big check, that lasted 15 or 20 seconds. Fortunately the people at the Cousteau Society were enlightened. They called him up. "We got your check. This is wonderful. What would *you* like?" "Nothing. Just do good things with it." Well, he began to feel bad about that donation. He began to think about other things he could have done with the money. It turned out what he really wanted in exchange for his ten grand was to have lunch with Jacques Cousteau, and he was ashamed to ask to have lunch with the great man and personally acknowledge what his work had meant to him and personally thank him. It gnawed at him for a year and a half. Ironically it turned out that when Cousteau first heard about the $10,000 check, he called in and said, "I want to meet this person." So Cousteau and his whole office were taking a responsibility about that relationship that the donor didn't take.

Some people make grants because they want to participate, some because they want to discover the purpose of their own life – it's different for every giver. But almost never does the recipient of a grant clear the giver on their motives for giving.



A. You think, "I have money, so how can I need anything?"

B. Yeah, "If you have $10 million, what else could you possibly need? You don't even have the right to ask for it!"

A. You know, it's pretty risky for the grantee to ask, "Why are you giving this money?" The grantor might say "I don't know," and take it it back.

B. It's a crucial interchange. Otherwise it's a once-in-a-lifetime grant and you won't have an ongoing relationship.

A. What do you want out of granting to the Nuclear Freeze Campaign?

B. I want to experience working on a political campaign. I want to be on the inside.

A. You don't care whether the Freeze passes or fails. You just want to experience working on the campaign.

B. No. I want to stop the nuclear-arms race.

C. If the option was being not very close to the center of the campaign and winning or being very close to the center and losing, which would you choose?

B. I'd do anything to see it win.

D. What if they say, "Give us all your money, but don't come down to the office," and you know all that support will make it win?

B. *All* my money?

D. What would you say?

B. Can I sleep on it?

A: That's a great answer. It shows you've learned from your previous experience.

•

AN EXPECTATION unstated will poison a grant.

•

IT CAN BE SCARY. If I as the recipient hear an expectation or requirement from you that I know I can't meet, then my integrity is at stake. Then I have to say, "I can't meet that expectation, so I can't accept the grant." In fact I haven't lost a grant because of taking that line. What happens is you start in motion a whole discussion with the grantor that will ultimately leave both of you feeling better about the grant.

Sometimes when the grantor begins telling you what he wants, he almost sounds like he expects to be your employer. I've had to say, "Wait a minute. I know more about this particular subject than you, and all I'm willing to do is have you empower me to carry it out in my way, and I'll tell you what I've done afterwards." It doesn't always go that way. Sometimes the job he wants you to do is exactly what you want to do, or you're willing to do it because you want the money. I haven't wanted those kinds. In a few cases I've told the grantor that they'll be working for me. I expect all sorts of information, future contacts, letters of recommendation, in addition to the airplane tickets their grant bought me.

What always happens if you follow Marlow's explicit contractual formula is, you end up getting three times as much value as you would have if you'd just taken the money and run.

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WE USE MONEY so often to buy convenience. When we use money to buy inconvenience, like in an involving grant, it's not what we're geared for.

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YOU CAN ALSO BUY *out* of involvement. Make it part of the agreement. "If I make this grant I don't want a phone call from you for two years. If we're at a party, I don't want you to bring anybody over to introduce them to me."

•

THIS COUNTRY was settled by Europeans before government could arrive with all its services. So there sprang up voluntary associations to pro-

vide those services. This was unheard of in Europe. De Tocqueville wrote about it extensively. So when government did arrive, it allowed for the tax deductibility of the private voluntary activities. The theory is that more can be done, and done in a more efficient way and more creative way, by voluntary associations than if it's done by government.

Charitable structures

1. Write a check and send it off to a tax-deductible activity. Not anonymous, so it will no doubt engender a return solicitation. It can be difficult for large-scale granting. It does offer maximum control. You decide what happens with your money.
2. A lawyer's trustee account is a way of making an anonymous gift. The lawyer's name is on the check. Your name is completely protected if the lawyer's any good. Again, you have maximum control, but it costs a little more.
3. A private foundation. That will cost $5000 to $10,000 to get it set up and run for a year without staff. Again maximum control, and you can operate at maximum tax advantage (up to 50 percent deduction if you spend all the money that goes into it within 14½ months of the beginning of the fiscal year). Once your money is in a private foundation it is in the public trust, and you must operate within all the rules and very restrictive operating guidelines of the Internal Revenue Service. It can be tricky. It takes more time.
4. A donor-advised fund offers a step down in control and a step up in anonymity. The foundation I operate does most of its granting through donor-advised funds. One retains the right to make recommendations which are reviewed by an independent board and rarely, but occasionally, turned down or modified. You're paying a staff person to operate in your behalf. You get complete anonymity. You get some additional tax advantage over having a private foundation.
5. Program-related investments are something you can do through foundations, which amounts to venture capital – high-risk funding – where it has social purpose. A private foundation can give someone almost any amount of money to build low-cost housing, for example. It counts as a grant. It's an under-used mechanism, horribly under-used. One of the reasons is that foundation staff types don't know anything about business, so they're reluctant to get into it. A private or public foundation can do it. You can buy stock, you can guarantee loans. When your money comes back from the investment it's treated as ordinary income.

THERE IS NO GOOD technical book on philanthropy.

Some advice:

1. Watch out for the tendency of advisors to institutionalize themselves. And once you create a structure, a foundation board or whatever, then you're pretty much locked into it.
2. Trust your intuition. It's probably the single most important factor in giving money away. Visit the grantee's scene. If the intuitive hit off those people is not good, even if you've heard great things about them, go with your feeling.
3. Clarity. (How many people here are still supporting a group they supported five years ago? Eight out of thirty. That's good, I'm surprised.) Be clear about how long you're likely to be involved with a grantee.
4. Let go after you make the gift. This business of reporting and evaluation is so overblown. If you're talking anything under $100,000, you can't expect further involvement, beyond maybe seeing a financial settlement.
5. Board memberships can be very difficult. If you're known as a philanthropist and you're invited on a board, somebody has got money in their mind – unless you say on the front end, "You got me *or* my money, period." It's the best rule I've ever heard, and following it is so rare it's unreal.
6. One of the best conceptions of the giving process is as a cultural venture capitalist. I don't generally like giving to large institutions except to do something they haven't done.
7. They're not going to like you very much. Money doesn't make people like you. The opposite happens. Instead of conversation you get "Everything's fine!"

•

I HAVE A RULE of creative board membership. I only serve on small boards. Once there's more than five or six people I'm not going to talk enough to stay awake. Large boards are zoos. They're destructive.

•

ONCE ONE GRANT IS MADE, two proposals are going to come back. David Hunter responds with printed postcards. He gets complaints from all over the world, but at least people know where they stand. I rarely look at a proposal twice. I make a decision when I'm first reading a proposal. You have to or you get buried.

•

THE BLACK GUY with his hand out because he's scared he's going to lose his house is really not

up to accepting you as a friend. If you demand that he does, he will hate you.

•

I WONDER IF putting yourself in a position of judging other people on a daily basis is an automatic way of destroying your own life.

•

JUDGING SAPS THE COMPASSIONATE sob sister in all of us, and that's a side of us that is vital.

•

DOES ANYONE here schedule their life so they're on six months or two years being a philanthropist and then some months or years off doing something else?

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SOME YEARS AGO two women were talking of improving nutrition at my son's school. I said, "Why don't you change the eating habits at all the private schools in New York?" They said, "Do you think we can do that?" I said, "Yeah. I think you can." For a couple hundred bucks they had a conference and in a year virtually changed the eating habits at all the private schools in New York. It's amazing what a little encouragement can do.

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LAST NIGHT was an incredible experience for me. I had no idea there were other people in the same situation as I am. I didn't sleep. It's like going into another world. I don't have any reference points.

•

SOMETIMES WHEN we want to give away money what we want to do is give away our feelings about money. What we end up with is we've given away our money but the feelings are still there.

•

FOR EVERYBODY who has inherited money is there a secret wish to give it all away and start like everybody else? And is there a secret fear of the same thing?

HOW MANY PEOPLE enter a space where they imagine they have a terminal illness and therefore have an excuse to be incredibly creative with large sums of money over a short period of time, or is that just my fantasy?

MY GENERAL RULE on using money to raise money after a lot of trial and error is if I want to raise money from somebody, there has to be somebody who knows both of us who introduces us and is there when we first meet. It's the only way to do it if there's significant amounts of money involved. You can't rush it and you can't force it.

You have to get to know the people you want to ask for money and you have to be part of their clique. They have to trust you and know you and know that you bring them good stuff.

If other people put money in your project as a quid pro quo, the commitment is not strong enough for any sustainability and inevitably you get into trouble. They should do it because they want to do it.

My theory is somebody's out there who's already said yes. You just have to find that yes. I don't believe at this level you can convince anybody. They have to be receptive and intuitively responsive. Which takes a burden off, because you don't have to be a salesman, you have to be a sharer. If somebody's really going to give money that works, they're giving it to themselves, and you happen to be the vehicle by which they give money to themselves. All you have to do is be out there far enough and broad enough that you find those people, and you carry around enough toys in your satchel that you know they're going to like one of them. It may be a squirt gun or a doll. You can't be rejected in the game at this level.

You'd better like the person if you take their money. If you don't like them you'd better not take their money because down the line it's going to be a mess.

At a certain basic level you have to really not care if you get money. Every time, you have to give up and drop your idea and meet that person where they are.

A good rule is the first time you meet someone, don't talk more than three minutes and don't exchange anything significant. Be patient. It might take a year. If you move too soon, you might read the signs wrong.

•

SOME PEOPLE POLLUTE the giving environment and turn off donors for good. It's like a well in the desert. You don't throw no shit in the well, because there's gonna be another guy on a camel coming by in 15 minutes. The well should be there for the women's group or the gay group or the butterfly-savers or whoever's next.

•

GRAND DAMES are that group of rich widows in every city who sustain the culture. One takes the opera, another the ballet. Many of us here are trying to change the world. These are people using their money to keep it the same. The grand dames operate out of decades of persistence. They have skills us hot-shot change agents could learn from.

•

MRS. PATRIARCH AND HER BUDDIES are committed to certain things. Their energy is focalized. They help you out of principle, whereas to the liberal progressives we are just a hobby. The really wealthy old lady knows exactly who she is – you may not like what she believes in – but she is secure and confident and when she comes to a conclusion her handshake is gold. The groovy types come in and they're judging us against 50

other things – is this holistic enough, does it meet my criteria of oneness? The grand dame comes in, she wants to know two things, "Are you bums going to steal or work for a living? Do you appreciate the finer things?" Show her the Beethoven record. The grand dame or the solid old gentleman will stay friends, even when they disagree with you. They have more power to forgive.

There's a difference between ethical people and nice people. You can't trust nice people.

•

YOU SHOULD BE RESPONSIBLE not only about how you give money away, not only about where it goes, but where it comes from. I think there is a social cost to a lot of our incomes.

•

IF YOU HAVE SOMEBODY you know and trust as a financial adviser, you can sleep well as well as eat well. And if you don't sleep well, what's the point of eating well?

SMALL GRANTS can't do a lot of harm and sometimes they can do a lot of good.

•

THE ISSUE OF PURPOSE is senior to all other decisions being made. There's a difference between purpose and goal – you can achieve a goal. Where purpose is lacking pain is evident.

IN ISRAEL this spring we met this passionately erudite rabbi – he used to be a businessman – who says, "Anyone's life is incomplete unless they are, in some smaller or larger way, saving the world."

•

THERE'S A TENDENCY among us groovy people to forget the old-line arts, the museums, the libraries. These are essential building blocks for the poor. Carnegie's sins are horrible, but his libraries are wonderful. There's no way we can treat literacy out in the street when there's no availability of literature. The really poor and the working poor love the old-time charity.

There seem to us to be two revolutions going on at the same time in the United States. One is a revolution of the middle and upper classes – it's been going on 15 or 20 years – in which the primary purpose has to be and should be to push back tradition and constraint because their lives are squeezed in. With the lower classes we have exactly the opposite problem. They *always* got laid. There's no sexual revolution for the lower classes. They always let it all hang out. One of the problems is they let it all hang out all over each other all the time, so there's no order and everything sticks together. The poor need to build tradition. They need stability, they need income, they need health care, and in their personal lives they need perhaps a little more restraint. It is wonderful to have pornography everywhere if you didn't get laid till you were 43 and you had a nice college background. But if you're a Catholic or a Baptist or an orthodox Jew, and the only thing in life is your children, and you don't have much money and you walk down the street and here's 50 huge signs telling you things you should do with whips and whipped cream, they're basically attacking the last vestige of your life.

The problems of the helping class and the problems of the helped class are very different.

I was hearing stuff in here I never heard before. I've never heard so many people say, "I don't know if people are after me for my money or not." If you ask that question a lot, the answer is yes. The reason is if you want to be loved, you must be lovable. If you want to be respected, you must be respectable.

What I sensed here was exactly what I see in the ghetto. Cowards hiding behind their blackness. Cowards hiding behind their poverty. Guys like me dramatizing their convict boring criminal roles.

And in here my third ear told me I was hearing an awful bad dose – in some people – of taking personal problems and ego problems and family problems and putting it on the fact that you had bucks and it hurt you. And maybe it did.

You got a choice. If there's a bully beats you up every day on the way to school, you got two choices. You can tell us that the bully is bigger. True. The bully is faster, the bully has more friends. All true. Or, you can go lift some weights and learn how to box. I suggest to you the second course, because with the first course you never get free of the bully.

There's a tremendous amount of self-pity that I think you ought to clean up.

I ALWAYS TELL THE STORY that if Pontius Pilate had been a smart Jerry Brown appointee, instead of a dumb Roman bureacrat, what he would have done when the stool pigeons came in and said, "We got this Jew nut carpenter running around talking all this weirdness that could very well be misinterpreted," he would have said, "Send for him."

Pontius would have took him out on the balcony, pointed to Jerusalem: "Jesus, I believe you. I believe all this brotherhood shit. I believe all this free the women, free the gay people, everybody eat, hard work, I believe it all. But you see those people out there. They're not ready for this change. You got to be practical, Jesus. You're a dreamer. You're an idealist. You're wonderful. But you're not practical.

"To make you practical, what I'm going to do is me and Rockefellus Fordus are going to give you matching funds. Five thousand dinars apiece, we

want you to start a halfway house in Damascus to see how many Samaritans you can integrate with Phoenicians. If you are successful over a seven-year period of time – so we have a random sample test situation – we are going to put Jesus Christ Halfway Houses in every city in the empire. We are going to fly you back to Athens to the conference with the barbarians. Jesus, you are going to see your dreams come true. You're going to be a big man. As long as you have the appropriate board of directors and as long as you remain within the 501 (c) 3 guidelines.

"Jesus, you're a nice guy, but you people don't know nothing. You hold some goddamn rally in the park, there's fish heads, bread ends all over. The whole soccer-team-for-the-kids budget has been eaten up with your bullshit rallies in the park. Then you go in the temple with the stick, you're going to drive out the moneylenders. Let me tell you something friend, because I like you. Now nobody can get a home loan! Nobody can get a small business loan! You're a nice guy, Jesus, but Roman society has simply gotten too complex. Maybe in the days of the Sumerians this kind of thing would've worked. So we'll fund your halfway house."

If Jesus would have bought that – and it must have been one of the temptations – the next year there would have been a fire in Tunis and then new state fire regulations, and Jesus would have had to come back to Pontius and say, "Pontius, I need $100,000 for new wallboard and fire escapes." Then two years later Jesus would come back and say, "Look, you've got to renew this funding. We're halfway through but we couldn't cut the whole thing. We had to give half of our budget away because of the Catapult Freeze Movement."

Jesus would have spent the rest of his life trudging into Pontius' office. And at some point when he was completely castrated, Pontius would have said, "Jesus, you've fallen in a trap. You've become dependent on big government. You've sapped the will and vitality of the Samaritans with this dependency, and it is time that we moved you into the private sector."

CHARITY IS ALMOST DESIGNED to destroy. I suggest that if you're new at charity, you might select a group and help them, with capital investment, to learn if they can grow or not grow. That's a community group that you trust and you know and you test and check first. You don't just listen to their leader (like me) and decide they're nice guys.

ONE OF THE PROBLEMS with schools is that they don't reflect realistic conditions. Businesses do.

WE BELIEVE THAT if you take you have to give and stay in the process, or else you become dependent and welfarized, ultimately crippled, and ultimately hate the people who help you. *[This description of the situation of some poor sounds eerily to me like the situation of some rich. –SB]*

GOOD INTENTIONS don't mean anything unless they can deliver. In fact they are a hindrance.

IN PHILANTHROPIC WORK I suspect that the long-range feeling of good – the distance – is the better good feeling.

OFTEN TO ACCOMPLISH your charitable purpose, along with defining that purpose, you must find out who does it best. And often the people who do it best are not the people you like best.

THE ONLY WAY OUT of the slums is help each other. The same goes in your situation. ■

NEXT CREATIVE PHILANTHROPY CONFERENCE

The conference participants ended by asking for more. They asked each other for more collaboration and got it, departing in energetic new groupings. They asked us for more Creative Philanthropy Conferences and gave sharp advice on how to improve them. Next time there'll be some grand dames. There'll be more time to free associate with other conferees between meetings, more small group work, and party instead of discussion Saturday night. A topic I want to pursue more is strategic thinking – not just "thinking globally and acting locally," but doing so with devilish cleverness. Ethical clarity – character, as they say – emerged as a crucial element of philanthropy and should be evinced further. Technical matters, from moral financial investing to structural granting options, need more detailed presentations.

So, same place, same price, the next Creative Philanthropy Conference is February 18-20, 1983. Write or phone Irmine Steltzner at Uncommon Courtesy. Please establish that you are or are becoming an active philanthropist.

WHEN: Friday evening to Sunday afternoon, **February 18-20**, 1983

WHERE: Yosemite Institute, Fort Cronkhite, Golden Gate National Recreation Area

FEE: $250 (includes all meals and lodging)

REGISTRATION: Registration deadline is February 8.

Phone or write:
UNCOMMON COURTESY
(415) 332-6106
Box 428
Sausalito, CA 94966

UNCOMMON COURTESY
COURSES WINTER 1983

UNCOMMON COURTESY

SCHOOL OF COMPASSIONATE SKILLS

BUSINESS AS SERVICE

Two-day tour

One of the most efficient, effective, enjoyable and freeing ways of doing good is with a business. It is the only form of service which answers directly and solely to the served. It can be used to bring a community together, to introduce a new idea or even ethic into the national economy, to support a charity made thoroughly independent by the business, to provide income that satisfies as well as feeds.

This two-day course takes place on a bus. The San Francisco Bay Area, in addition to its other amenities, has a newsworthy abundance of "right livelihood" businesses which are prospering. To examine their highly various ways of doing well by doing good, the bus will be a rolling seminar punctuated with visits to exemplary success stories.

The tour guides and seminar leaders are PAUL HAWKEN, MICHAEL PHILLIPS, and STEWART BRAND. Hawken is the founder of Erewhon, the first organic food distributor, and Smith & Hawken Tools, which is redirecting the entire tool industry toward durability and quality. He is the author of the forthcoming **The Next Economy**. Ex-banker Michael Phillips is the founder of the Briarpatch Network of right-livelihood businesses in the Bay Area (only 60 of its 600 establishments have failed in eight years) and author of **The Seven Laws of Money** and **Honest Business**. Brand founded **The Whole Earth Catalog** and **CoEvolution Quarterly**.

If you wish scenic low-cost lodging and meals for the nights of January 26 or 27, add $30 per night to the tuition.

WHEN: 9:30 a.m. to 5:30 p.m., Thursday-Friday, **January 26-27**, 1983.

WHERE: Bus leaving from Fort Mason, San Francisco.

FEE: $160 (lunches included).

REGISTRATION: Deadline for registration is January 18.

STEWART BRAND

←
A home-care basic, how to make a bed with the patient in it. Hospital corners on the sheets optional.

HOME CARE TRAINING

Two-day workshop

Replace the hospital for an ailing relative or friend. Using the **Going Home** videotapes developed at Mount Zion Hospital, we'll teach by demonstration and practice: positioning and moving a patient, massage, skin and mouth care, nutrition, bowel and bladder care, pain control, emergencies, and stress reduction.

If you want to stay overnight at Yosemite Institute, add $25 for lodging and meals.

WHEN: 10 a.m. to 5 p.m., Saturday-Sunday, **February 5-6**, 1983.

WHERE: Yosemite Institute, Fort Cronkhite, Golden Gate National Recreation Area.

FEE: $60 (lunches included).

REGISTRATION: Enrollment is limited to 25. Registration deadline is January 28.

STREET SAINT SKILLS

One-day intensive workshop

For city denizens this intensive workshop teaches public helpfulness. From lecture, role-play, physical exercises, and discussion, you'll learn how to spot street trouble before it develops, act effectively in emergencies, be an accurate witness, make a binding citizen's arrest, summon aid, and encourage other "street saints."

Chief instructor TERRY DOBSON is a fifth-degree black-belt aikido instructor and author of **Safe and Alive** (reviewed in the Spring 1982 **CQ**).

WHEN: 8 a.m. to 9 p.m., Saturday, **March 12**, 1983.

WHERE: Yosemite Institute, Fort Cronkhite, Golden Gate National Recreation Area.

FEE: $60 (includes lunch, dinner, and snacks).

REGISTRATION: Enrollment is limited to 40. Registration deadline is February 25.

REAL FIRST AID

One-day intensive workshop

It is not a question of whether you will need first aid skills, but when. The emphasis in this introductory course is on realism — both in preparing you for real world situations (not just an isolated laceration or compound fracture but the darkness and screaming and chaos of an automobile accident, for example) and in the realistic training techniques.

The course is designed to complement the "Street Saint Skills" workshop on the previous day, so you may take either one independently or make a fierce weekend of it and take both — at some saving of time and money. "Real First Aid" by itself costs $60. Combined with "Street Saint Skills" the fee for both is $105, if you take lodging and meals on your own. With lodging and meals included the fee is $130 for the whole weekend.

WHEN: 9 a.m. to 5:30 p.m., Sunday, **March 13**, 1983.

WHERE: Yosemite Institute, Fort Cronkhite, Golden Gate National Recreation Area.

FEE: $60 (lunch included).

REGISTRATION: Enrollment is limited to 40. Registration deadline is February 25.

UNCOMMON COURTESY TOWARD DEATH

Two-day seminar

"Together we learn to bow to death, to life. Using guided meditation, group discussion, and deep listening to ourselves and others, we merge with life, honoring the various deaths that accompany each stage of our birth."

Seminar leader STEPHEN LEVINE is director of the Hanuman Foundation Dying Project and author of the astonishingly effective 1982 book **Who Dies** (reviewed in the Summer 1982 **CQ**).

The seminar is for anyone near death — anyone bereaved, anyone dying (and mobile enough), anyone not dying just now but expecting to someday, relatives and friends of the very ill, hospice workers, medical professionals, religious professionals. . . .

Stephen Levine's public appearances tend to be full houses. If you plan to attend, you may want to register early. For an additional $25 you can get overnight dormitory lodging and meals a half-mile from the seminar site (an old army chapel).

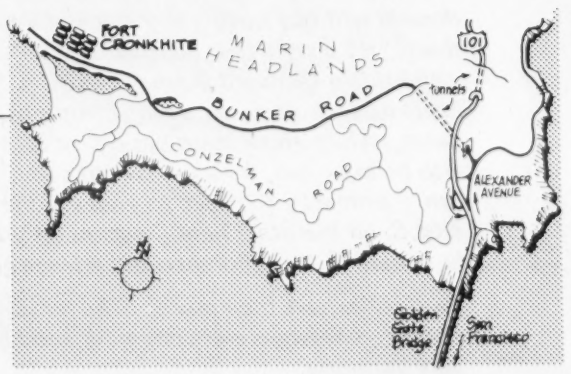
WHEN: 10 a.m. to 5 p.m., Saturday-Sunday, **March 19-20**, 1983.

WHERE: Yosemite Institute, Fort Cronkhite, Golden Gate National Recreation Area.

FEE: $65 (lunches included).

REGISTRATION: Deadline is March 10.

To sign up or request information, write
Uncommon Courtesy
Box 428
Sausalito, CA 94966
or phone (415) 332-6106, Irmine Steltzner, Monday-Friday, 10 am to 5 pm.

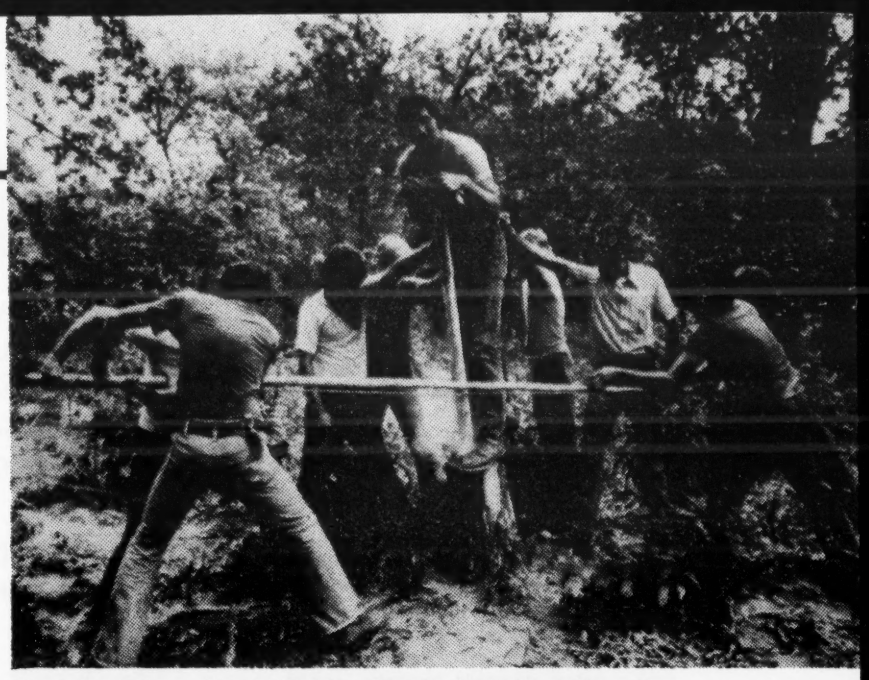


Tom Brown's The Tracker School

I have just participated in one of the week-long "standard" courses given by Tom Brown, Jr., which is the prerequisite to more advanced studies, adventures, and vision quests. The standards are held on the Tracker family's farm in northwestern New Jersey, while the others are usually held in the wooded Pine Barrens further south. The outdoor living skills taught include animal and people tracking, nature observation, fire-making, shelters, water, food, trapping, toolmaking, and tanning. The entire program is based on Native American lifestyles and philosophies. Tom's approach, developed through years of outdoor living and learning with his Apache teacher, Stalking Wolf, is based on the understanding that the Earth can provide all our needs if we only know how to recognize and carefully receive her gifts. His instruction emphasizes the process of learning rather than a fixed goal. Following a set of tracks or finally tracking down an animal is not the point; learning how to read each track to tell what the animal was doing is: was it male or female, did it turn right or left to look at something, was it calmly feeding or was it being pursued?

The course is full of activity. Tom and his six assisting instructors, currently two women and four men, kept us busy from eight a.m. to eleven p.m. with short meal breaks. They are serious about getting information and skills across to students, yet there is humor and playfulness throughout. They are also incredibly patient in responding to questions and helping people to master the skills. I enjoyed getting to know all of them. The material is covered by alternating talks with time to practice one or more of the most effective methods in each area. For example, we made and used a bow-drill for fire-making, a "debris hut," wooden utensils, stone work, a solar still, and two kinds of arrowheads and an arrow, and tried several kinds of wild edibles. We practiced two kinds of silent walks, the "fox walk" and "stalking," camouflage, and a blind walk, and learned ways to relax into a deeper enjoyment and awareness of all the life around us.

Some of the highlights of the week had little to do with learning skills. Everyone had an opportunity to participate in a sweat lodge, and we helped build one. Tom led all 40 staff and students in a powerful pipe ceremony that brought us all much closer together. —*Becca Harber*



Tom showing a class in Pekin, Illinois, how to make a fire with a bow drill. The students made this giant bow after they learned the bow could be any size. It worked fine, as shown by the smoke near Tom's feet.

Instructor Tom Brown wrote **The Tracker**, *reviewed as "a masterpiece of lore on how to see and how to learn" in the Summer '82* **CQ**. *A sequel,* **The Search**, *is a bit less compelling but tells about the author's growing up and how he started his school.* —*Art Kleiner*

The Tracker School
Courses
$365–415

Catalog
free from:
The Tracker, Inc.
P.O. Box 173
Asbury, NJ 08802

The Tracker, *by Tom Brown, Jr. and William Jon Watkins; 1978, 229 pp.; $3.50 postpaid from Berkley Publishing Company, Book Mailing Service, 20 Addison Place, Valley Stream, NY 11580; or Whole Earth Bookstore.*

The Search, *by Tom Brown, Jr. and William Owen; 1980, 233 pp.; $7.45 postpaid from The Tracker, Inc., P.O. Box 173, Asbury, NJ 08802.*

National Outdoor Leadership School

Three years ago I received a reporting assignment to find out why three kids had drowned in an Outward Bound wilderness-kayaking course in Baja California. I decided I should kayak the route. Outward Bound, naturally enough, had cancelled their course, but another outdoor-education outfit, the National Outdoor Leadership School, ran a class that covered the same territory. I signed on with NOLS. I got my story. I also got one hell of an outdoor education. In fact, as I look back on it now, it was the best three-week investment I ever made.

*In simple terms, the NOLS goal is this: to teach you the skills necessary to survive in the wilderness — whether it's kayaking in Alaska, mountain climbing in the Rockies, or backpacking in Africa — and to pass through that wilderness without leaving any trace of your having been there. It's a style best contrasted with that of the more well-known Outward Bound (***NWEC** *p. 577). OB is at heart a psychological training camp not unlike a boot camp. While you'll learn basic survival skills, you might also be expected, for example, to complete a seven-mile run — primarily to prove to yourself that you can do it. NOLS, on the other hand, teaches only those skills directly related to the wilderness experience.*

Both styles have their merits. The fundamental difference, I think, is between self-command and harmony. Me, I'll take harmony. —*Joe Kane*

National Outdoor Leadership School
Courses
$675–$2750
Catalog
free from:
National Outdoor
Leadership School
Post Office Box AA
Lander, WY 82520

Learning to self arrest

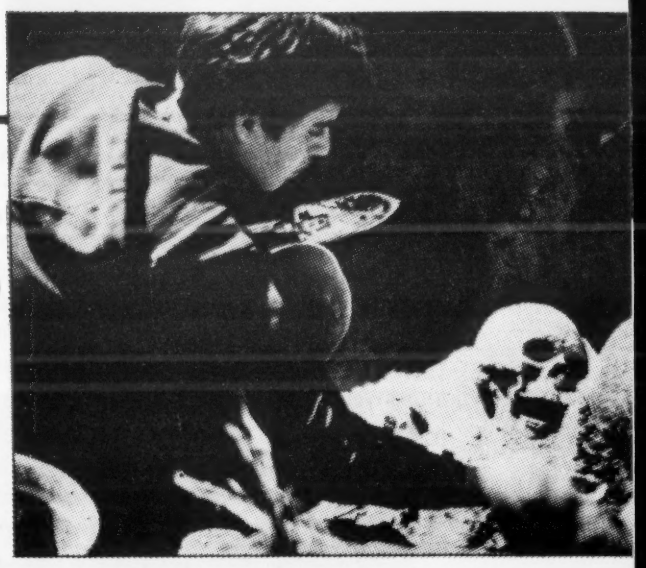
- **Mountaineering in the Northwest:** This is an excellent opportunity to learn and practice the skills essential to climb in the major mountain ranges of the world. The North Cascades contain more than two-thirds of the glaciers in the continental United States. The course emphasizes glacier travel, snow and ice climbing, and alpine traverses, in addition to basic wilderness subjects such as hazard evaluation, map reading, route finding, meteorology, and the identification of local fauna and flora. 32 days, $1100.

Audubon Expedition Institute

One of the more tempting education opportunities around is this school-bus load of students (high school through graduate school) that travels all around the country each year from September through May. The bus stops at such diverse locations as wilderness areas, Native American communities, and, as a matter of fact, my own turf until recently, The New Alchemy Institute. Students don't stay in the bus, either. They hike, ski, bike, boat, and participate in the action of the areas they study, for graduate, undergraduate or even high school credit. Praise for this school is high and I can see why: There's that indefinable feeling of reality that is missing from so much classroom instruction. They have scholarships and summer expeditions too. —*J. Baldwin*

[Suggested by Jim Swan]

Audubon Expedition School
$5890/year (Sept.-May)
Information
$2 from:
National Audubon Society Expedition Institute
950 Third Avenue
New York, NY 10022



Cultural Perspectives of Human Communities — covers basic concepts in cultural anthropology; methods of archaeological excavation and correlation of data; field study of four different types of cultural communities (prehistoric, native American, Utopian religious, and industrial).

Taking the Path of Zen

As simple, unassuming, and wholesome as a toothbrush, Robert Aitken's introduction to Zen Buddhist practice is the most inviting and clarifying of primers. (The others are **Zen Mind, Beginner's Mind** *[NWEC p. 584], which is subtler and more Japanese, and* **The Three Pillars of Zen,** *which feels a shade didactic. I'm not quite Buddhist, so I'm perfectly happy making invidious comparisons.) Poet Gary Snyder recently took Aitken Roshi as his teacher, and he introduces this book. Zennies I know love the understated warmth of the book as well as its matter of fact accessibility. Of course reading the book without practicing zazen — sitting meditation — is as productive as writing with a toothbrush.* —*Stewart Brand*

Taking the Path of Zen
Robert Aitken
1982; 149 pp.
$9.50 postpaid from:
North Point Press
850 Talbot Avenue
Berkeley, CA 94706
or Whole Earth Bookstore

•

How to Connect. When I was a classroom teacher I always felt there was more hope for the student who threw a piece of chalk at me when my back was turned than for the one who put his head down on his desk. That piece of chalk gave me a chance to do something, to say something. But what can one do if there is no response? In meeting with the roshi, it is important that you speak up and show something. Don't try to conjure up a question, however. If you have nothing to say, just come and say, "I have nothing to say." That is a complete presentation.

The heart of Zen Buddhism, indeed the heart of other religions also, lies in dialogue. Such dialogue is designed for the purpose of awakening the student. It is not designed to support the self-esteem of either party.

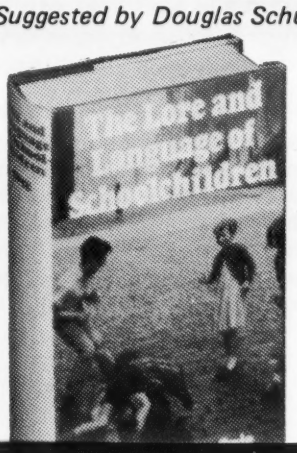
The Lore and Language of Schoolchildren

Schoolkid tools: how to hold your own in the witty wacky world of urchin talk. These raw ingredients of English verbal firepower — wit and speed in rhyme and back chat — were collected hot off the streets and playgrounds of the world. The book was researched in the Britain of the fifties by the gently humorous Iona and Peter Opie, authors of **Children's Games in Street and Playground** *(NWEC p. 556). They discovered and documented the worldwide underground kids' conspiracy that we all live through but often forget.*

Americans nosing around these ditties and word plays recognize much of the guff and then come up with good ones of their own. Meanwhile, out in the yard, the brats are still at it, jabbering away from the Bronx to Berkeley, just waiting to be researched for the up-to-date American version. A ready-made school project — investigate the juniors! —*David Wills*

[Suggested by Douglas Schuler]

The Lore and Language of Schoolchildren
Iona and Peter Opie
1959; 433 pp.
$29.95 postpaid from:
Oxford University Press
16-00 Pollitt Drive
Fair Lawn, NJ 07410



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A trick popular with 10-12-year-olds (Birmingham, Lydney, and Shrewsbury) is called 'The Duck Pond.' A boy takes someone's hand, and professes to trace on it the plan of a farm. 'Here's where the barn is, and here's where the cowshed is, and here in the middle,' he says, spitting into the person's hand, 'is the duck pond.'

•

In Alton, Hampshire, the very clever have lately learned to say:

My name is:	In the United States:
Addi, addi, chickeri, chickeri,	What's your name?
Ooney, pooney, om pom alari,	Puddin Tame.
Alla balla whisky,	Ask me again
Chinese salt!	And I'll tell you the same.

—*Maryland.*

The Maryland verse has previously been recorded in **The Sussex Archaeological Collections**, 1861, 'What's yer naum? Pudden and taum; Ax me agin, and I'll tell ye da saum,' given as current 'thirty or forty years ago' (i.e. *c.* 1825). 'Pudding and Tame' seems to preserve the name of the fiend or devil, 'Pudding-of-Tame,' listed in Samuel Harsnet's **Popish Impostures**, 1603. A number of similar formulas were collected in the nineteenth century, e.g.:

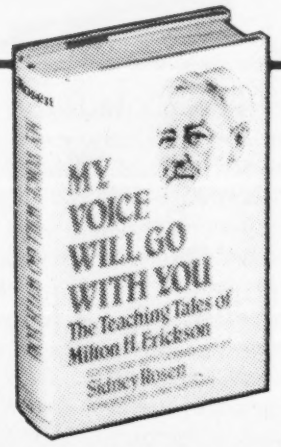
What do they call you? Patchy Dolly.
Where were you born? In the cow's horn.
Where were you bred? In the cow's head.
Where will you die? In the cow's eye.
—*J.O. Halliwell, 'Nursery Rhymes', 1844, p. 162.*

My Voice Will Go with You

Bypassing the conscious mind and speaking directly to the subconscious through metaphor is an art which modern man seems to have lost. Milton Erickson is the exception. He spoke in tales not only to induce hypnotic trance but to inform the listener of systemic relationships which consciousness does not understand.

This book is a collection of 117 stories he used in psychotherapy and teaching other psychotherapists the art of subconscious communication. Composed of situations involving relationships with his family and patients, many of these simple stories sleep in one's mind only to be awakened when the need arises. Some merely put one in trance. All are enjoyable, not only to therapists, but especially to lay readers interested in themselves and others. As in any true learning experience, no special training is needed. —*Douglas Dean*

My Voice Will Go with You
(The Teaching Tales of Milton H. Erickson, M.D.)
Sidney Rosen, Editor
1982; 250 pp.
$16.95 postpaid from:
W.W. Norton and Co.
500 Fifth Avenue
New York, NY 10110
or Whole Earth Bookstore



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When dealing with a problem of difficulty make an interesting design out of it. Then you can concentrate on the interesting design and ignore the back-breaking labor involved.

•

Style

My daughter came home from grade school and said, "Daddy, all the girls in school bite their nails and I want to be in style too."

I said, "Well, you certainly ought to be in style. I think style is very important for girls. You are way behind the girls. They have had a lot of practice. So I think the best way for you to catch up with the girls is to make sure you bite your nails enough each day. Now I think if you bite your nails for fifteen minutes three times a day, every day (I'll furnish a clock) at exactly such-and-such hour, you can catch up."

She began enthusiastically at first. Then she began beginning late and quitting early and one day she said, "Daddy, I'm going to start a new style at school — long nails."

Starting by "joining the patient" in her desire to be in style, Erickson proceeds to make the "stylish behavior" into an ordeal. He often used this approach to symptoms — making it more of a bother to keep them than to give them up.

The Thaler method

Thaler is a real-life economic and social system, based on the Thaler (1 Thaler = 1 cent), and operated by middle-school and high school students. Originated in a depressed mill town, it places economic and political power in the hands of the students. As the system within a school evolves, or refines its economic and judicial systems, it becomes a laboratory of economic and democratic freedom.

The school legal system consists of a Bill of Rights and Code of Behavior, an adult Board of Directors, and an elected Student Government. Each governing committee must ratify the non-academic policies of the other. Deadlocks between the two groups are taken to "town meetings" of the student body, one person to a vote.

Thaler employs students in cafeteria and maintenance work, and some routine teachers' chores. Other employment arises naturally from the Thaler System itself, in the bank, payroll office, employment office, license and patent office, redemption center, food center, bookstore, recreation center, and legal system. (Judges and lawyers must pass an extensive bar exam.) As students catch on, they bring their own skills (skateboard repair, tutoring) into the skills market place, with a hands-on initiation into real-life economics.

In the Gilman, Vermont school system, the Thaler System was credited with reducing school discipline by 95%, reversing low morale within the school, and dramatically increasing the number of students at or above grade level. But other schools are reluctant to bring economic and political equity to the school. The problem is the issue of power; many educators reject sharing the decision-making process.

Though the program has operated successfully in three schools since 1978, it's now running only in a Rutland, Massachusetts public middle school. That school still sells the Thaler manual, which can help any school start a Thaler program of its own. —*Rho Weber Mack*

Thaler Manual
Barry Grove and
Naquag School
1980; 17 pp.

$7.50 postpaid from:
Naquag School
Main Street
Rutland, MA 01543

Toughlove

Some teenagers bully some families. This book provides rationale, good harsh advice, and access to other parental support for parents who have had it with their terrorist kid. The trick is structure — consistent, clear, enforced rules — along with refusal to participate in kid manipulation games. It demands consistency and clarity from the parents. Tough enforcement passes those qualities to the kid, and home can stop feeling like a war zone. 'Tain't easy. Adolescence is catching. —*Stewart Brand*

Toughlove
(A Self-Help Manual for Parents Troubled by Teenage Behavior)
Phyllis and David York
1980; 97 pp.
$6 postpaid from:
Community Service Foundation
P.O. Box 70
Sellersville, PA 18960

or Whole Earth Bookstore

•

If you always respond in the same way your kids will always know which buttons to push to get what they want. We prescribe as an antidote CHANGING YOUR PATTERN OF RESPONSE.

- If you usually yell, be quiet.
- If you're usually quiet, yell.
- If you usually stay involved, withdraw.
- If you usually withdraw, get involved.

•

Stands that other parents have taken are:

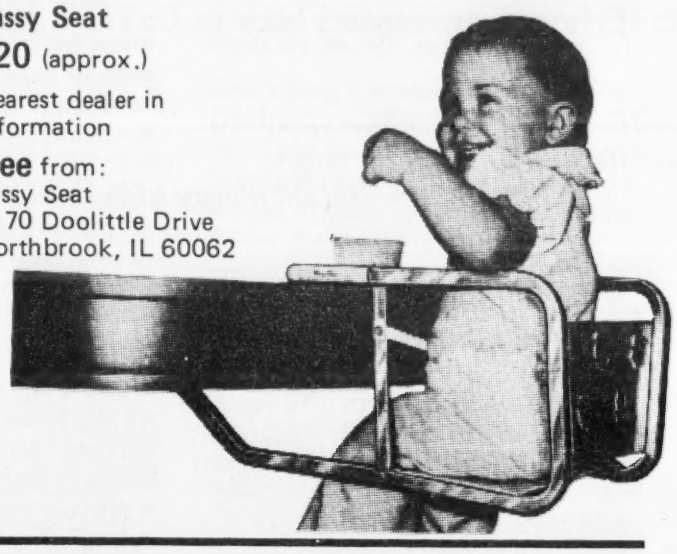
- There will be no dope in my house, it is illegal.
- You may not drink alcohol, you are underage.
- You may not have dope or be high in my house, you are nasty when you have used it.
- You can have a beer when I am around.
- You can use dope to relax or get a light buzz, but we will not live with a stumbling, incoherent kid.

Sassy Seat

This invention is the greatest. Along with the fold-up stroller, it lets you go places with a child that would be awkward or impossible to get to otherwise. It does not fold, which if possible would be even better, but it is extremely lightweight and easy to take along. I used it as my going-out chair and left it in the car, but it could totally replace a highchair in the home. What it does, using the principle of counterweight, is safely attach to virtually any table (except glass) without damaging the table or your child.

There are different brands of these seats — even a fancy, Swedish-modern one costing over $60 — but this Sassy Seat is the cheapest and best I've seen. —Andrea Sharp

Sassy Seat
$20 (approx.)
Nearest dealer in information
free from:
Sassy Seat
3170 Doolittle Drive
Northbrook, IL 60062



Lookabout Baby Carrier • Baby Bag

Two highly recommended tools for transporting small children. The Lookabout is the first baby carrier we've seen that holds kids in front of their parents so they can see what's going on and reach out to it. Suggester Jacqueline Mast, a physical therapist, wrote that "the baby doesn't stand up in it and shift his weight all over the place, and it makes me stand in a better posture so that I don't get round shoulders." She said it's particularly useful for physically handicapped children. The Baby Bag is a comfortable, waterproof Hollofil snowsuit that fits (with baby) easily into a Lookabout or other baby carrier, or into a stroller or car seat. "Not only is it easier to get a child into and out of than a regular snowsuit," wrote suggester Barbara Heller, "but my daughter seems to be more comfortable and more in control of her position." Both carriers are reasonably priced. —Art Kleiner

Lookabout Baby Carrier
$26.20 postpaid
(polyester-cotton blend)
$28.20 postpaid
(all cotton)
Specify peach or sky blue color
from:
Lookabout
203 Oak Avenue
Woodland, CA 95695

Baby Bag
$35 postpaid from:
The Baby Bag Company
2 Bisbee Street
Camden, ME 04843

Lookabout baby carrier

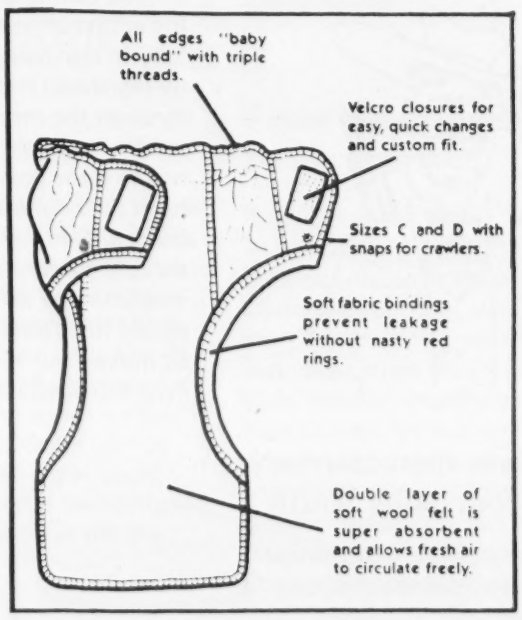
Baby bag

Biobottoms

Lots of babies develop terrible rashes from paper diapers or from wearing rubber or plastic pants over their diapers. Often a simple solution is to substitute soakers — knitted pants — for plastic. Biobottoms are a tailored cloth version of soakers, made from 100 percent white wool felt. They are very absorbent, so wet diapers don't have to be changed as often as when using plastic pants. They are also rather expensive — $11.50 a pair by mail. They claim that the Velcro fastening eliminates the need for diaper pins, but using pins worked best for us. We don't use Biobottoms exclusively; Pancha didn't get bad rashes, and we couldn't afford four Biobottoms. I like to put her in them at night, so she doesn't have to wear plastic pants for twelve hours. For many parents, though, they have been the only answer to chronic diaper rash.
—Evelyn Eldridge-Diaz

Whereas disposable diapers are bad for your baby, your pocketbook, and your local landfill, Biobottoms "combine the comfort, ease, and ecology of natural fibers with the ecology and safety of cloth diapers." —Reta Rickmers
[Suggested by Dennis Gellhouse]

Biobottoms
$11.50 /pair
postpaid from:
Biobottoms
57 Grant Avenue
Petaluma, CA 94952



BACKSCATTER

Echoes from readers back to CoEvolution Quarterly

Backscatter (Electromagnetism): Radar echoes from a target.
—McGraw-Hill Dictionary of Scientific and Technical Terms

Uncommon Aquinas

Here's what Thomas Aquinas had to say about doing good: "The Seven Spiritual Works of Mercy: To teach the ignorant, to counsel the doubtful, to console the sad, to reprove the sinner, to forgive the offender, to bear with the oppressive and troublesome, and to pray for us all.

"The Seven Corporal Works of Mercy: To feed the hungry, to give drink to the thirsty, to clothe the naked, to shelter the homeless, to visit the sick and prisoners, to ransom captives, and to bury the dead." Good luck,

Chris Hennig
Ralston, Nebraska

Y'all come back

. . . It appears to me that what passes as uncommon courtesy in your area would be considered common courtesy here in the South. I believe what you are looking for is a well-brought-up Southerner transplanted to your area. Hopefully, he/she would have lived in a more open society long enough to be able to separate what is phoney in Southern manners from the true grace that underlies them.

"Grace," I was taught in the church, means "unmerited gift" and the idea of giving your love and kindness to others regardless of their actions is the basic tenet of all good manners. Your example of Prince Charles was apt: he acts as royalty should, instead of as others deserve.

Lois Duffield
Johnson City, Tennessee

JAY KINNEY

Better values than courtesy from the courteous South

Here in the courteous South I read with interest Mr. Brand's proposal for a school of Uncommon Courtesy, and the reflection that "simple courtesy is the main glue holding society together. . . ."

True enough most of the time, but we also know that surface courtesy has long been used to paper over the cracks in Southern life. Case in point is the very cordial 15-year process of stalling school integration, detailed in **Civilities and Civil Rights** ($5.95 postpaid from Oxford University Press, 16-00 Pollitt Drive, Fair Lawn, NJ 07410). Author Chafe spent eight years interviewing people involved in the battle to desegregate schools in Greensboro, North Carolina, site of the first lunch counter sit-in in 1960. White leaders who defended segregation; blacks who opposed integration to protect their own culture; and blacks and whites who struggled for 15 years to provide quality public education for black children. Chafe's conclusion: *only when blacks challenged the very language of civility* (petitions, special committee meetings, et al.), beginning with sit-ins and ending with the Black Power movement, *were reforms instituted.*

To be sure, civility is not lightly abandoned, but at times there are values — such as quality education for our children — more fundamental than courtesy. Perhaps the school of Uncommon Courtesy will help to distinguish such fundamental values before the times do.

Steve Unruhe
Durham, North Carolina

Small-scale creative philanthropy

. . . My family group has three working adults at home. We send an old lady in our community $80 a month by registered letter, in cash, to get her through the month safely. It's a small chore, but it's direct, and she's not so poor now, there's some love to it. It puts our ideals about "voluntary poverty" into perspective, that we share some funds with someone who's involuntarily poor. I wonder what would happen if we working people all moved our money around our neighborhoods this way.

Kathy Wright
Oakland, California

More predominantly, please

Re: "White America is Predominantly a Viking Culture" by Michael Phillips (Summer '82 **CQ**):

A woman who is employed in child-care services in Sweden recently told me that employers must agree to six-hour working days, if requested, for parents who have children in the home who are eight years old or younger. My immediate reaction was "WOW!" Fewer dinnertime hassles between tired moms and tired kids. More time for neighborhood play and visiting. Medical and dental appointments without the loss of a day's pay. Time for shopping and errands. Less guilt and conflict over the question of working out of the home. An opportunity to continue in, or join, the work force, maintaining and improving skills and knowledge. WOW!

Judith Hunter
Pittsford, New York

Vikings, nein

. . .With a B.A. in medieval and Scandinavian history from the University of California at Santa Barbara, graduate studies in history at the Swedish universities in Lund and Stockholm, and more than eight years of trying to explain Scandinavia to the world over Radio Sweden International, I just can't let all Michael Phillips' mistakes go by. . . .

Calling all Germanic peoples and periods "Viking" is about as accurate as calling all Americans "Californians" (or "49ers") just because some of them are (or were). Obviously the Vikings were Germanic, and share much in the way of language, culture, and traditions with the other Germanic peoples. The invaders of the British isles in the fifth century were not Vikings, they were Angles, Saxons, and Jutes, Germanic tribes from the area south of the Danish peninsula. Old English did not, as Phillips states, come about from a fusion of Anglo-Saxon and the Old Norse of the Danes when they occupied the eastern part of Great Britain three hundred years later. Anglo-Saxon is Old English. And while the current English tongue owes much to Danish loan words from that period (for example, the word *bread*, which in modern Swedish is *bröd* or *broed*), at least half our language comes from the Anglo-Saxons.

The other half comes from the Normans. I think Phillips is also in error to describe them as Germanic as well. True, the Norman leaders were of Nordic descent — a weak Frankish emperor found that the most effective way to keep the hordes of invading Viking pirates out of the northern part of what is today France was to

turn over part of the area to another group of Vikings charged with keeping the peace. The Viking leader — Hrolf, or "Rollo" as his name was modified by the Latin tongue — carved out the Duchy of Normandy, and it was from there that his descendant William the Bastard launched his invasion of Britain in 1066 and succeeded in going down in history as "William the Conqueror." But along the way the Norman lords lost most of their Scandinavian culture and language. By the time they invaded Britain they were thoroughly French. In fact, after the Normans conquered England, there wasn't a king of England who spoke the English tongue of the Anglo-Saxon peasants (whose Old English combined with French to become the Middle English of Chaucer and the Modern English of Shakespeare) until Henry the Fifth in the fifteenth century. . . .

The American founding fathers, Washington, Jefferson, etc., obviously did not get their ideas from the Rome and Greece of their day. But they were inspired by the earlier generation of the French Enlightenment, writers like Voltaire, who glorified what they imagined were the great democratic traditions of classical Athens. Just as the government buildings in the District of Columbia are modelled on the way the founding fathers perceived Classical architecture, the Declaration of Independence was inspired by their perceptions of Classical Democracy. (The Constitution is something else — some would argue that it was a coup by rich capitalists to impose an elitist government to replace the loose democracy and decentralization of the Articles of Confederation.). . .

Phillips does have a point that to see America's future one can look to Britain. But to a large extent that could also be attributed to Margaret Thatcher having pioneered the same policies that are now backfiring for Ronald Reagan the way they did for her some time ago. I would agree that Sweden does offer some hope for the future. Sweden was the first (and perhaps the only) country that could have built a nuclear bomb and decided not to. It is a country that has completely eliminated poverty, and yet preserves a democratic tradition. It is also a country facing many of the problems that remain when poverty is removed — alcoholism, drug abuse, a rising sense of alienation, and racist attacks against some immigrants. . . .

George Wood
Stockholm, Sweden

The Tolkien resonance

. . . Tolkien lived amid the Norse legends. He studied them, in the original languages, with all the nuances of thought that the particulars of language entail, as his professional career. Inevitably, we are a product of what we immerse ourselves in. The creative few filter their surroundings more effectively, and add a special something from themselves, leaving more than should be expected. Tolkien gave us a Viking-based creation myth [**NWEC**, p. 508], one which has received surprisingly little discussion considering its profundity. He regularly said that what he wrote was *not* allegory, and what he did in the beginning of the **Silmarillion** was to distill the essence of the various Norse myths in which he had immersed himself, telling them in the language of *our* time. There is, for all that he *might* have been shocked to hear someone say it, more in the **Silmarillion** about where we could have come from in the beginning than there is in the Bible, and the more recent book has the weight of a mighty and effective tradition encompassing even more centuries of great searching religious minds behind it, Viking minds. As with examining Pizarro or the other conquistadores in the light of the richness of the cultures they slaughtered, it strongly behooves us to ask, "Just who is the barbarian here?" once again, as Phillips suggests. Have we never been on the wrong track before? . . .

Terence P. Yorks
Bellevue, Colorado

JAY KINNEY

Mighty Thor speaks

Having myself written an issue or two of Marvel Comics' **The Mighty Thor**, I found Michael Phillips' article very interesting, and it goes a long way toward clearning up something that has always puzzled me: why Marvel Comics could peddle the adventures of Thor (whose name doesn't exactly have the ring of, say, Superman or The Hulk) for 20 years, yet could never get a regular series featuring the far better known Hercules off the ground. Could be our Jungian archetypes are Nordic, as well.

One Viking contribution to modern culture that Michael overlooked: The Cosa Nostra. The idea seems to have originated with the Vikings who settled in Sicily (whence we get blond-haired Southern Italians) and proceeded to exact tribute in return for "protecting" the locals from invaders. The same pattern emerged in Scotland, where the heinous payments (or "mail," as it was called) were looked upon with such revulsion by the Scottish natives (who nonetheless paid up) that it was referred to as the "black mail" — and we're all familiar with *that* word.

Now I begin to wonder if the government's insistence on the necessity of nuclear missles isn't somehow connected to the Viking religious notion of Ragnarok, the Twilight of the Gods, when all the gods and demons would be destroyed and the Earth charred to a cinder. Maybe the seeming irrationality of our leaders (most of whom fit into the white/Viking grouping as outlined by Michael) is the result of a religio-cultural programming that they cannot even begin to resist; they are being *driven* toward Gotterdammerung. Not that there's any empirical verification for this idea, but it's a scary thought.

Steven Grant
New York, New York

S/M and factions

. . . There seem to be three distinct classes of clash between S/M people and the culture at large ["Feminism and Sadomasochism," Spring '82 **CQ**]. Female sadists and male masochists get flack for violating stereotypical sex roles. Female masochists get flack from the feminist community for *not* violating stereotypical sex roles. Only male sadists conform to the community. Perhaps anomalously, male sadists who are into S/M sex seem among the most sensitive/aware males of my acquaintance. . . .

Ivan
Deer Isle

From the dreamers to the doers

Speaking about Gifts ["The Gift Must Always Move," Fall '82 **CQ**), how about a column in **CQ** where people could donate/"give away" to the common domain any great ideas for projects they know they'll never be able to follow up? Sometimes I think of or hear of ideas for wonderful inventions, or product ideas, or new ways of doing things that would make the world a better place, but don't have the necessary expertise or experience to do anything about them. This column (possible title: "Things I'd Like to

See") would allow us to give these ideas to other people who might be in a better position to develop them and bring them into reality.

Here are some starters:

A sewing-machine repair for the complete idiot book. Sewing-machine repair can't be that complicated. I know lots of people who pay outrageous sums just to have their machine oiled or other minor adjustments made, just because they don't know where to start.

Change-your-own-oil stations. You put a fee in the slot and your car goes up in the air on a lift, so you can easily get under and dump the oil, lube, tighten transmission-system bolts, etc. Could be combined with a do-it-yourself car wash . . . .

"Piercing the Corporate Veil: A Corporate Guide to Living Free in America." A book on the way American corporations freeload off each other. Best example I have thought of is slant-drilling (oil company drills at a slant into another company's claim). Someone in business law might know lots of others.

Judith Goldsmith
Berkeley, California

JAY KINNEY

Unmoving gifts entrap

. . . The people from who I learned how to be a human (i.e., my mom and dad — mostly) had values concerning ownership and acquisition such that gifts weren't gifts — they were mostly a way to annex the gifted into the ego-territory of the giver. I learned, therefore, to regard gifting as dangerous and painful. So I don't give gifts much and when I do they're hardly ever anything as big as a **CQ** subscription. . . .

Dianne Oklejas
Belleville, Michigan

New elephant joke

. . . An elephant fell in love with a mouse and asked her to marry him. The mouse agreed. And so they were married and went home to the elephant's marriage bed. The following morning the mouse found the elephant dead. "Alas," she said, "for one night of pleasure I must spend the rest of my life digging a grave."

Richard Chernick
Asbury, New Jersey

About farts

. . . An Eskimo girl once told me that when she was young she thought that white people didn't fart. . . .

Rick Hodes
Rochester, New York

CQ "REGULAR", "BOLD", "LITE", "DARK"

Last issue I asked readers, What would you think of two kinds of **CoEvolution**, *one with our occasional sexually explicit articles, one without? Would you send a less-offensive* **CQ** *to some friends you now don't consider for the magazine? I said the tamer "Regular" edition would be the usual 144 pages, but clean. The "Bold" edition would enjoy our present depraved editorial standards, so it would be the same as "Regular," plus conceptually newsworthy filth — hence occasionally more than 144 pages.*

Never have we received such mail. Never so much, never so ferocious. Here is a tiny sampling. It is edited for space, presented in random sequence. Discussion continues after. —*Stewart Brand*

NEIL J. RUBENKING

Good for Xerox, bad for CQ

. . . Myself, I can take the "bold" along with the do-good articles, in fact I've learned things I probably wouldn't have otherwise. But I've found that in order to turn on someone else to an article, I must Xerox it and give them just that copy rather than the whole magazine for fear they will be offended by the "bold."

Example: I gave my father-in-law an issue to show him a Paul Hawken article. My father-in-law is an ex-army Colonel who spent 15 years with the CIA. He is now involved with investing. Well, the shit hit the fan when he took to looking through the rest of the issue and ran across two women finger-fucking each other! Jesus did he get pissed! Hence he questioned Paul Hawken and your magazine. Not to mention the looks I got. . . .

Chris Moore
Carmel, California

Acid flashforward

When I first read your ideas about running two versions of **CoEvolution Quarterly** I thought the acid had finally flashed back forever. I wondered why you couldn't simply exercise tighter editorial control. If we live one life, why publish two magazines? . . . I did begin to notice, though, that you were exercising an honest concern for the readership's well being. And I salute the mixture of courage and humility it took and think that if you and staff feel you can pull it off you should *go ahead and do the two books.* . . .

Joe Curran
Oakland, California

Must be one of God's many mysterious ways

Could someone explain why, with 144 pages in an issue, if a guest in my house randomly opens **CQ** one time, it will always be to the page with bare breasts?

Michael Morse
Garrett Park, Maryland

Edit but don't conceal

I think the idea of offering **CQ** in two editions is a fine one for two reasons:

1. It will make it possible to get most

of **CQ**'s material to more people. This is good in terms of spreading ideas and in terms of providing needed revenue.

2. It will remove whatever pressure there is now towards censorship by providing a way that controversial material can be published without jeopardizing the whole show.

Once upon a time I would have said there is an obligation to try to open people's minds whether they like it or not; now my attitude is that most folks won't learn what they don't want to know anyway. Fighting that takes valuable energy and invites attacks on the magazine as a whole. . . .

It might also be worth printing a little explanation of which edition is which on the magazine, or even a list in each of which items only appear in the complete edition — again, this is in the service of keeping everyone aware of what's going on. . . .

Missy Mink
Brooktondale, New York

Trust is not divisible

. . . I feel that the importance of **CQ** is derived from the fact that I *trust* you and the staff to let me know of things that you find interesting, important, and useful, and there continues this wonderful resonance between you very thoughtful, caring, and in-tune folks and me, as we travel along. There are already too many people/media hypes trying to tell me what it is they think I want to hear, studiously avoiding anything unpleasant or controversial or "off-color" while they aim at the lowest common denominator and try to sell me something. . . .

I kind of hate to see two editions, because it means you'll then have two types of subscribers: true friends and acquaintances. If you can stand it, I guess I can, but I want your plain old unadulterated lovable irreverent but godly self, because what you do for me is irreplaceable.

John Henry
Tallahassee, Florida

Giving up community

I have recently discovered **CQ** and the **Whole Earth Catalogs** in the University of Arizona libraries where I am a grad student. I am writing in response to your ideas for making more money.

I am taking two economics courses now and the lesson is you don't get something for nothing, there are just clever ways of hiding what you give up. All of your latest ideas involve the readers giving up something besides money. Those other things are the quality of the magazine. I would rather pay the money.

We give up a piece of privacy when you sell mailing lists. That isn't too bad because we can get out of it for 20 cents and a letter. For unclassified advertising we give up some of the screening of material you do. This is most serious because that is what we pay you for. But if the unscreened material is clearly differentiable from screened material, it's acceptable. Personally, I think the ads should be removable to be more easily differentiable.

The latest idea — two editions of **CQ** — gives up something which would really hurt — the community of the readers. You do lose readership because of some people's "sensibilities," but that price is better paid in money from less-sensitive people than by splitting the community of people who aren't afraid of any good ideas (paper won't bite). If that community is too small to support a magazine such as **CQ**, then more than **CQ** is lost. In other words, figure out how much it will cost to make **CQ** self-sustaining, (without the catalogs, they sound like a lot of work to subsidize **CQ**) and tell us and see who subscribes. Don't think up gimmicks to avoid taking our money.

Ralph Stuart
Tucson, Arizona

DON RYAN

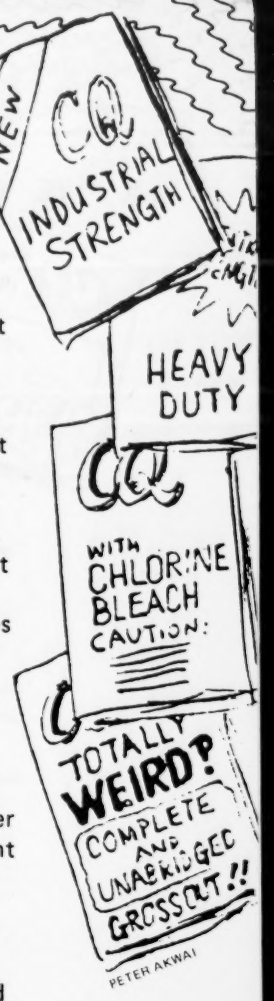
CQ Digest

Today in the mail arrived **CQ** and **Reader's Digest**. I do not particularly like either magazine, but, having a day with no needs more pressing than to process a few last vegetables from garden to freezer, I read both. It is my mother-in-law who subscribes to **RD** for us at Christmas each year; it is my husband who subscribes to **CQ**. Ordinarily I don't read much of either, preferring John Gardner or Doris Lessing or Kurt Vonnegut or a M*A*S*H rerun. I do like some of the humor of **RD**. I do like (and sometimes use) the catalog aspect of **CQ**. . . .

CQ and **RD** are both magazines which celebrate the human being. You both publish tales of triumph and you both publish explorations of what threatens humanity. But nothing you ever publish could be as loathsome as "The KGB's Magical War for Peace" in today's **RD**. Give me a fart any day. I'd much rather shudder at R. Crumb, who confronts his horror in a way which acknowledges his responsibility for it and mine, than at John Barron (the **RD** editor who wrote "The KGB's . . ."), who blames the horrors all on *them*.

To divide **CQ** would be to turn your readers and yourselves into the first subtle divisions of *us* and *them*. Don't do it.

Susan Y. Wanner
Charlotte, Vermont



PETER AKWAI

Break it to the kids gently

Now that you mention it, the very first issue of **CoEvolution** I ever read (grew up in India. Yours is a fantastic tool and cultural reassurance) — was given to me by an enlightened photographer who said she didn't want articles precisely like the "S&M" special lying around the house for her children to meditate on and provide some embarrrassment to the odd guest in the house.

That woman (and the kids) deserve your magazine, but its reputation has now shut the door. As a junior-high teacher, I'd say that a "Regular," censored version would mushroom the "youth" market — parent's money, you know. Break it to them gently.

Joel Baird
Cambridge, Massachusetts

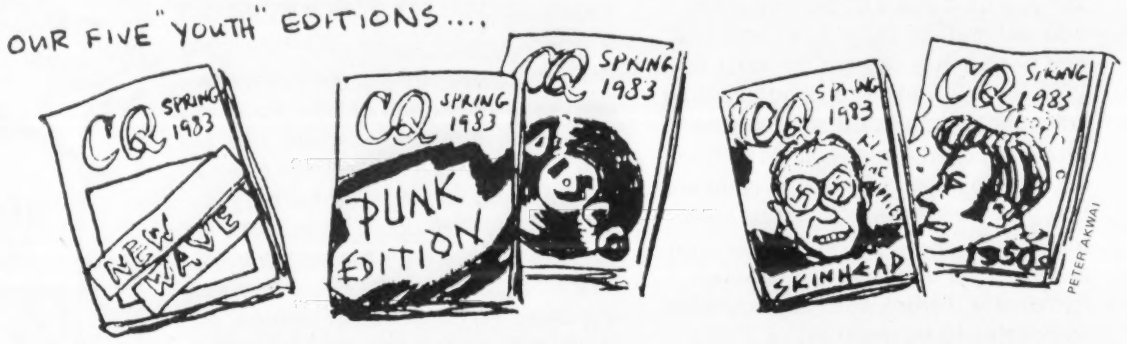
Fear and hope

. . . I like to think that the stuff is genuinely subversive; that one or two minds in the complainer's own realm have been opened up, through an article of yours, to a universe beyond the little playpen world that the forces of repression would build; that those minds will hold, as a result, a little more understanding and tolerance of the world's sexual diversity. In other words, what the complainers fear, I hope for. . . .

Joan Howe
North Quincy, Massachusetts

And bolder and bolder

I wish to cast my vote for bold, bold, bold in response to your proposed dual editions. I have to say that your "questionable" articles are invariably my favorites. I find it exhilarating to have my head turned on real issues dealt with in rational manner or riot-



ous approach. It is precisely this openness to explore these difficult and bizarre realities that is the first step to a new modern philosophy. And that's what I see that **CoEv** is about.

Water it down, but call it "baby brother." I will only send **bold** issues even to my shaky friends. I want the meat with the matter — the kernel with the corn. I'm glad that you are caring, but you cannot be **CoEv** if you compromise clarity. There is a lot of dirt out there, more than you folks could dream up. It is so nice that you rake it for us. Readers should see this as a service, not a sacrilege. Bold, Broad, and Both Barrels.

Jim Kovarik
Memphis, Tennessee

Save the magazine

Dear Art:

. . . I not only worked for magazines, I owned one. I was Associate Editor at **Psychology Today** magazine back in the (good) Del Mar days; Executive Editor of **Playgirl** magazine (in the insane days); and founded **Freebies**, a magazine later sold to some folks who continue to publish it out of Santa Barbara. I still write a nationally-syndicated newspaper column of the same name. . . .

. . . You folks asked about selling the mailing list, and I said "Sure, just save the magazine." You asked about running unclassifieds to make money. I said "Sure, just save the magazine." You wanted to know if we the people would accept lesser stock and other production changes. Anything, just save the damn magazine.

So now one of the few remaining magazines in the country to represent any kind of a mental challenge wants to know if it can print two separate editions in order to spare some alleged readers psychic trauma. My answer this time is different, yet the same. I say *No*, but for the same reason — in order to save the magazine.

It seems to me that **CQ** would be committing institutional schizophrenia with this scheme, and setting out on a course that ultimately winds up someplace unpleasant. In agreeing to make a quarterly decision about what's "clean" and "dirty," I say you'd wind up compromising everything and everybody. **CQ** is what it is because of how and why it publishes what it does. It just can't be two different magazines, or it risks being nothing at all.

May I point out that exactly what you're proposing (well, what Stewart is proposing, really) was tried down here by the once-robust **L.A. Free Press**. Certain that their massage-parlor ads and panting classifieds were the cause of advertiser and reader shyness, they divided amoeba-like into two entities. Both halves flopped. . . .

Setting aside the question of the moral/social/philosophical debates and contortions you staff folk would have to endure quarterly, I seriously question whether this scheme even makes minimal financial sense. I find Stewart's argument that a "clean" **CQ** "might have a circulation twice or more of what our present filthy rag has" highly doubtful. No magazine I've ever heard of doubled its circulation by changing its content. Period. Worse, in order to test this highly dubious hypothesis, considerable quantities of scarce resources (human and financial) would have to be placed at risk.

Has it not dawned on those suggesting this excursion that many of us have given **CQ** as a gift precisely because it is occasionally irritating? Yes, yes, of course some of the stuff has been disgusting, repulsive, tasteless, vile and perhaps even not nice. Sometimes that makes me angry, or makes me think, or just makes me realize that there are those who live in a very different reality. But jesus, (oops . . . sorry . . . Jesus) folks, that's exactly and precisely what **CQ** does to earn its keep.

I realize you're proposing to add a "clean" edition, not censor what I get, but somehow the whole idea makes me feel . . . well, sort of dirty. . . .

Brian Weiss
Santa Monica, California

Sex is not the problem

. . . I don't think that taking out the rare items like the sadomasochism article will turn **CoEv** into a gift publication. It seems to me that it is more the intellectual articles that keep your circulation low than the offensive ones. I despise Crumb's work in the same way Stewart's mother does, but taking it out of the magazine wouldn't make it suitable for my relatives. Does that make sense? There are equally hifalutin publications, of course, but they are specialized to one field — you are the only *eclectic* magazine specializing in non-pap. All the people I know that would appreciate **CoEv** already subscribe. . . .

Suzette Elgin
Huntsville, Arkansas

Hallmark
LITE
A third less serious than regular greeting cards.

CQ not morally reliable

. . . When you run pornography I am not offended, and I think the others who cancel their subscriptions are not either. We just feel betrayed. What success **CQ/WEC** has is entirely built on the honesty and trust between publisher and reader. You can't have intense, personal, sharp, gutsy, provoking reviews and reports and keep people listening unless we readers trusted you all. I've learned to take your opinionated views seriously because you're usually proven wise. I'll listen to J. Baldwin's subjective opinions because they are usually right after I check them out. In general I've learnt that I can trust you to educate me, uplift me, prod me, change me in many areas. Except one. I've learned that I can't trust you in moral issues — you're completely fuzzy there. Even your praiseworthy endeavors with the

School of Uncommon Courtesy don't mend my mistrust, because I don't know where you or **CQ** stands. You must have something sacred. That myth about potentially printing anything is untrue. There's a four-volume series put out by Paladin Press on **How to Kill A Man**. It's the real stuff — want to run a review?. . .

My choice for **CQ** is to leave *in* all the strangeness, mischieviousness, all the disturbing news, all madness except anything that encourages dishonesty, murder, theft, idolatry, greed, sexual explicitness, and any celebration of evil. (Ask a grandmother what's evil). Leave it bold and leave it single. . . . Just compromise some.

Kevin Kelly
Athens, Georgia

Six projections

1. **CQ** continues to run both poetry and fiction, the two most disliked features, in both dark and lite editions. Testy readers cancel subs due to offense at mediocre verse. **CQ** folds.

2. Uncensored ads run in all editions of **CQ**. Lite readers discover gross/offensive personal ads after perusing fine print and cancel subs.

3. Subscribers to Bold **CQ** take offense that insufficient amount of raunch is in their **CQ**s, cancel subs in protest.

4. Mailing service makes strange error and switches labels on Lite and Dark copies. Lite subscribers surprised to receive **CQ**s with in-depth photo-feature on carnival geeks cancel subs en masse.

5. Thrilled by new wholesome Lite **CQ**, loyal subscribers eagerly put in thousands of new gift subs for their parents. Mistaking **CQ** for **Reader's Digest**, thousands of parents are freaked out to discover we've discontinued "Humor in Uniform" and "The Most Unforgettable Person I've Ever Met." They cancel en masse.

6. Mistaking Dark **CQ** for import beer, **CQ** reader chokes to death trying to chug. Scandal. **CQ** folds.

—Jay Kinney

Minister prefers "Bold"

. . . You know why my church subscribes? I get more Sunday lesson (hate the word "sermon") ideas from **CQ** than anywhere except the Bible (a close second). So much for "a fart in church. . . ."

I plan to give a gift sub for Christmas and if I have to choose, I'll take the Bold . . . .

Gregory Barrette, Minister
Unity Church
Alhambra, California

The label-and-hide tactic

. . . Maybe potentially offensive pieces could be sort of enclosed in a brown paper wrapper with a warning attached. It could be perforated and torn out if it seemed undesirable. Why not print it backwards so it would have to be read in a mirror to further insure safety. . . .

Lynda Peddy
Fair Oaks, California

Coda

Question: Are there people I would like to gift with **CQ** or encourage to subscribe if a "Regular" edition were available?

Answer: Do bears go to the restroom in the woods?

Tom Struckman
Missoula, Montana

Does a bear go to the restroom in the woods?

No. And that's what doing one faint-hearted, compromised **CoEvolution** *would feel like, both to editors and readers, I believe.*

I'm abundantly grateful for the abundance of mail on this subject. It has been suspenseful, fascinating, encouraging, broadening, and ultimately clarifying to read. I learned that all our readers like controversy and usually like or at least tolerate reports from society's fringes. What is not tolerated at all by some is aggressive sexual material. Four-letter words, four-letter graphics, four-letter articles. Well, that's pretty specific. Something that distinct can actually be designed around.

So, figuring we can, the question is, should we? Many letters expressed moral and political outrage at the people who wrote complaining about this or that sexy **CQ** *article. I studied the outrage letters and, excuse me, discounted them. Intolerance of intolerance is self-canceling. Many letters worried, sometimes to the stars above, that censorship was about to be visited on their favorite weird mag. These were an honor to read, but again they were discounted. The whole point of two editions is to keep one as nasty as necessary to print all the news, fit or unfit.*

This magazine specializes in wading into cultural cross-currents. The volume and forcefulness and ambiguity of the letters on the two-issue issue tells me to proceed full tilt, not hang back, till we find out what's at the bottom of that whirlpool (gravel, no doubt, and gold in the cracks of the bedrock, and slimy bones). Bless the torpedoes, full speed ahead.

I especially appreciate the letters that worry about our soul, that quote Lear (the Fool actually): don't "Pare your wits on both sides and leave nothing in the middle." I figure if I can be polite to a friend's parents in a different way than I am to the friend without losing either of them or my soul, then two **CQ**s *is at least possible. If not, then it will be at least educational, an interesting mistake. And we have an obligation, I feel, to try stuff.*

As for the many (a third? a quarter?) who said yes, they would gladly gift friends and relatives with a less raspy **CQ**, *now's your chance. You and your friends are part of the experiment.*

Terminology is still congealing. I said "Regular" and "Bold" in the last **CQ**, *"Lite" and "Dark" in the Christmas mailing (to emphasize that all this is a matter of taste, not good and evil). Maybe we'll settle on "Lite" and "Bold" — gentle four-letter words for a distinction that could use some gentling.* —Stewart Brand

BUSINESS

Gossip

The editorial "you" is an even odder notion than the editorial "we" (and its cousinship to the royal "we," as in Queen Victoria's "We are not amused").

Of late "we" have been up to our eyebrows in "you." Brace yourself: we're about to share the experience. Someone noted years ago that **CoEvolution** *cares both less and more about its readers than do other magazines. Less because we don't carry display advertising and hence have no interest in your breakfast food habits unless they are newsworthy. Less again because we have strong (if migrating) opinions and self-ignition curiosity and don't need someone else's interest to stimulate ours.*

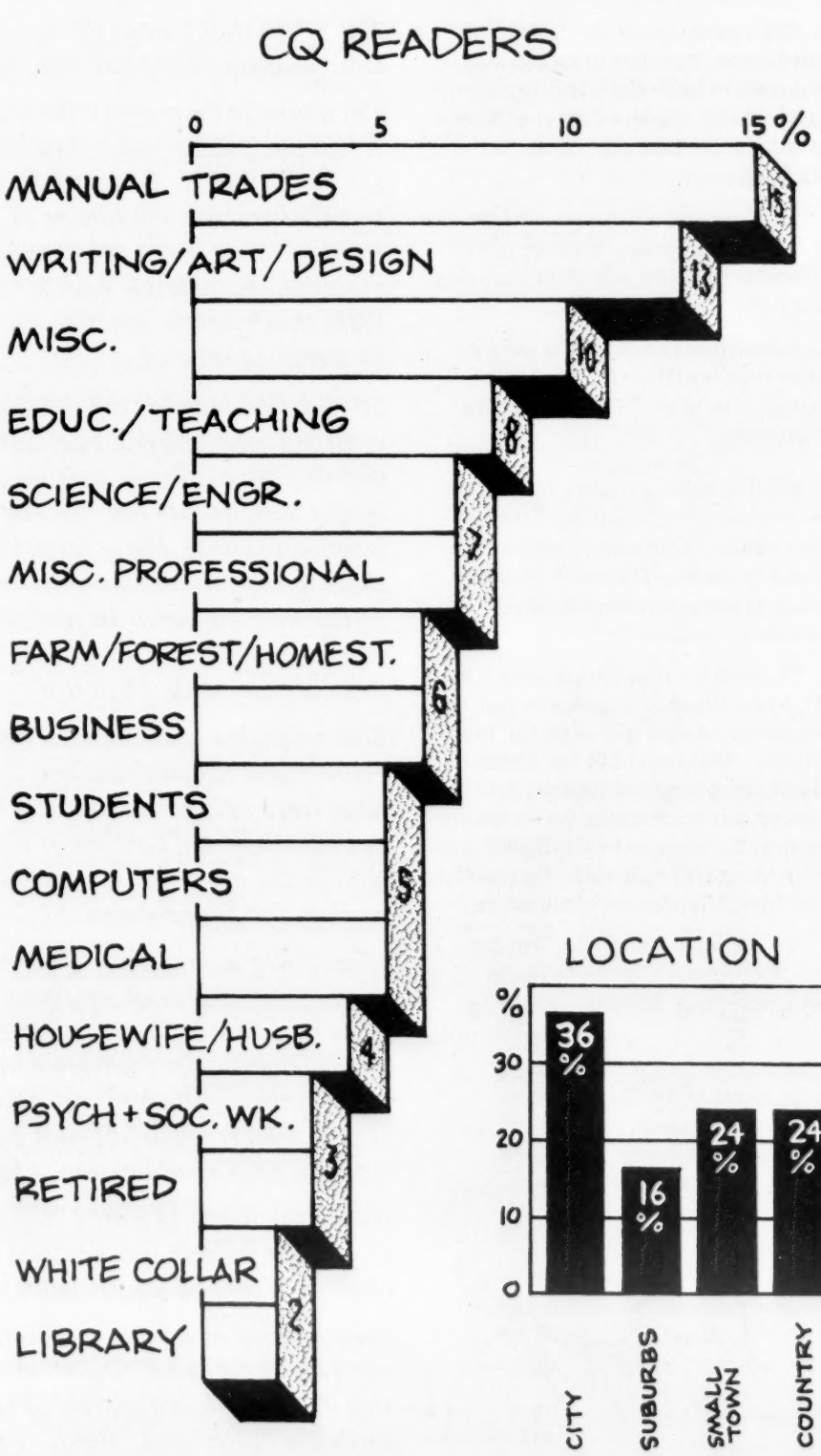
The reason we care more about our readers is because you compel our interest and reward it. You lead bizarre and diverse lives, write fascinating letters and articles and regularly surprise us. If that's flattery, then how come meta-curmudgeon Ivan Illich agrees? ("Through no other journal could I reach a comparable motley readership of unusual critics.")

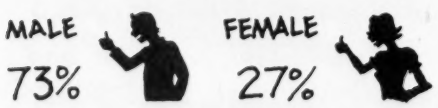
The last few months we've sent out questionnaires, penned by the legendary all-purpose-clerk R. Fugett, to accompany subscription renewal pleas. Boy did you write back. Clear opinions, good advice, and some statistical surprises. Of the first 250 who responded, 10 percent claimed to be over 50 years old, and only one reader confessed to being under 20. Since we've imagined ourselves as positively courting the youth market, that was a rude awakening. Many of the older readers appeared to be old rads, which is doubly good news since such are known to be exceptionally durable, living and reading and politically active well into their 100s.

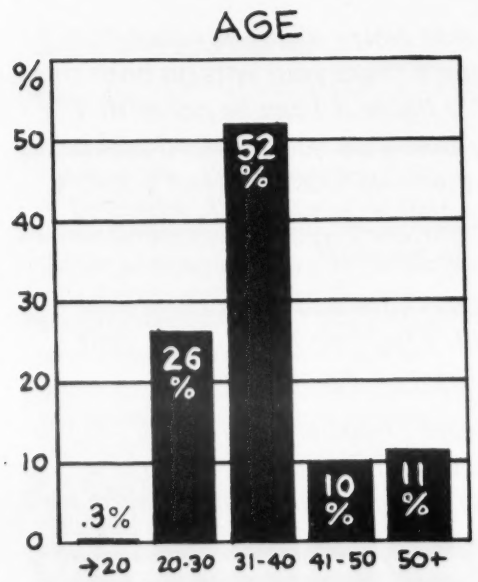
The largest work-mode percentage among readers is manual trades. We're honored. The most popular **CQ** *writer, by a mile, is Paul Hawken. The least popular kind of article is sexual. Eighty percent of you have ordered things we've reviewed, and 96 percent say you got what you expected. That is too high, we cannot possibly be that reliable. It is a trust beyond what we have earned but one we would like to earn.*

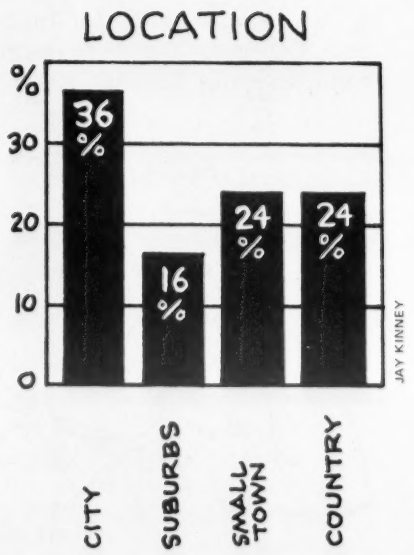
Want a self-portrait in T-shirts? Last issue we offered four literary torsos — "Love," "Libraries," "Wealth," and "Beams." Hot items — 313 sold in the first two months. Score: "Libraries" (141), "Beams" (81), "Wealth" (48), "Love" (43). One lesson I draw is that both "Libraries" and Paul Hawken are about the economy, so we're going to do more on that subject. Watch for a coming anonymous feature called "Real Intelligence" that will make **Newsweek**'s *"Periscope" look short and upside-down.*

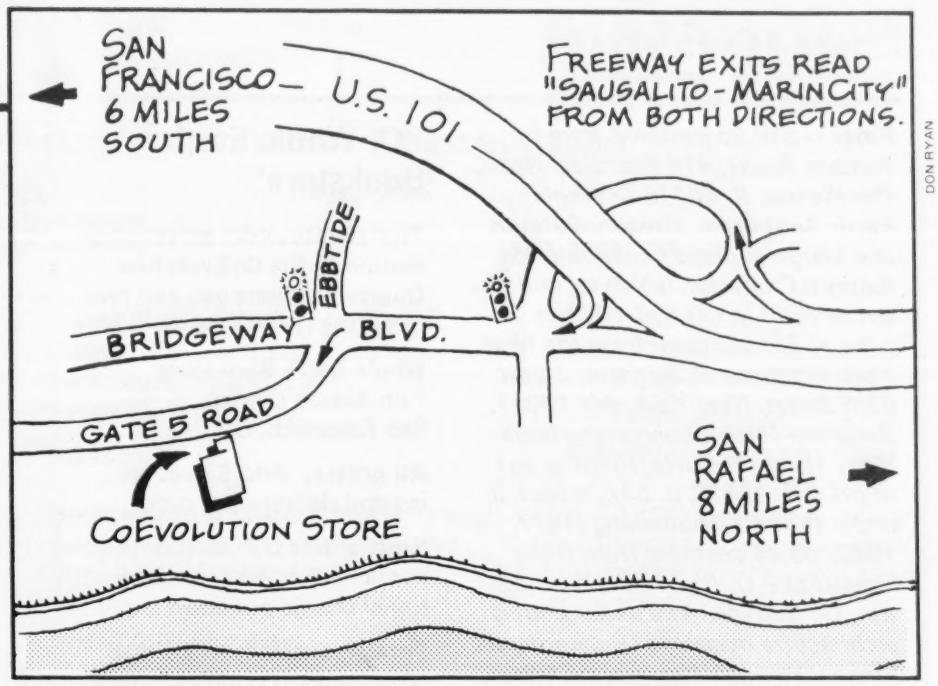
Another lesson from all this is that **CQ**'s *readers are quite interested in each other (when they're not lambasting each other: "Civilization-endangering perverts!" "CQ-endangering uptights!"). Hence the expanded soapbox called "Backscatter," p. 136, and hence the apparent popularity of the* **CQ** *"Unclassifieds."*











DON RYAN

Routes to the CoEvolution Store **at 27 Gate Five Road, Sausalito.**

You and the economy have converted another of our cherished practices — jealously guarded privacy. Now you're warmly invited to come and visit the front-of-our-office "CoEvolution Store." (Not the mentally fragile back office where the magazine is trying to come together. **Wooden Boat** *magazine in Brooklin, Maine, permits tours to come through. It takes them hours to settle down after each one.) The store carries everything advertised in our back pages plus factory seconds at reduced prices, rare early issues of* **CQ**, *low-stock items such as* **Two Cybernetic Frontiers** *and* **Space Colonies**, *discounted review books, and new products we're trying out. See map.*

Meanwhile our other open door, the Uncommon Courtesy program of "compassionate skills" courses, has expanded so rapidly we've had to hire a full-time staff for it, Sausalito neighbor Irmine Steltzner. I read in some feminist tract that the greatest untapped source of experienced talent in the culture is mothers whose nests have recently emptied. Irmine makes me a believer.

Back in California after two years at New Alchemy Institute on Cape Cod are Soft Tech Editor J. Baldwin and Liz Fial. Their New England sabbatical was capped by triumphant design and fabrication work on a new bio-shelter dome. Now they're teaching at World College West at its new Sonoma County campus. Their Univega country bikes (reviewed in Fall '82 **CQ**, *p. 79) are the envy of the* **CQ** *office; there's talk of a group buy.*

All in all the trend here is for **CQ**'*s editorial "we" to become increasingly accurately plural (more intelligences on the magazine end taking editorial responsibility) and increasingly inclusive of "you." That process could turn* **CQ** *to instant tapioca, but instead it seems to be drawing our fine distinctions even finer. Thank you. Don't let up. It reinforces Kenneth Patchen's Message from the Assistant Chief of the Fly People: "We live one life. Message ends."*

—Stewart Brand

DON RYAN

Always voracious moonlighters, now some of the CQ **staff are becoming entrepreneurs. Left, Anne Herbert, author; right, Kathleen O'Neill, designer; both modeling and partnering their Rising Sun T-shirt business. Details in their Unclassified ad on p. 145.**

Next Whole Earth Catalog Access Update

Fernand Braudel's history book of the real details of everyday life, **Capitalism and Material Life, 1400-1800** *(***NWEC** *p. 37) was revised in 1979 and retranslated from the French last year. The new edition has many new pictures and, says Paul Hawken, "is significantly different — warmer, more human, with much new material." It's now called* **The Structures of Everyday Life** *(1967, 1981; $30.35 postpaid from Harper and Row, Keystone Industrial Park, Scranton, PA 18512 or Whole Earth Bookstore).*

How to Die With Dignity, *the how-to suicide booklet for the terminally ill published by Scottish Exit (***CQ** *Summer 1981), has been withdrawn from circulation because of lack of sales. This news came from Derek Humphry, director of Hemlock, the American counterpart to Scottish Exit. Hemlock's own suicide book,* **Let Me Die Before I Wake**, *is still available from their new address: P.O. Box 66218, Los Angeles, CA 90066-0218.*

Another book withdrawn from circulation is **Show Me!**, *the beautifully photographed children's sex education book (***NWEC** *p. 563). St. Martin's Press has spent more than $100,000 to defend the book against obscenity charges since 1976, but when the U.S. Supreme Court finally ruled this July (People vs. Ferber) that states can ban all nude photographs of children, no matter what redeeming value, to protect children's identity, the publisher stopped shipping copies. Unless a bookseller is arrested for selling it and that case goes to the Supreme Court,* **Show Me!** *will henceforth be unavailable. Too bad.*

Good news: The British children's book about peace, **The Peace Book** *(***CQ** *Summer 1982), is available for the first time from an American pub-*

lisher — $10.95 postpaid from Bantam Books, 414 East Golf Road, Des Plaines, IL 60016 or Whole Earth Bookstore. Gregory Bateson and Margaret Mead's collaboration **Balinese Character**, *which we said was out of print in* **CQ** *Fall 1982, is in print at $37 postpaid from the New York Academy of Sciences, 2 East 63rd Street, New York, NY 10021. Benjamin Ruhe's boomerang book* **Many Happy Returns**, *listed as out of print on* **NWEC** *p. 547, is back in under the title* **Boomerang** *(1977, 1982; $8.45 postpaid from Ruhe himself at P.O. Box 7324, Washington, DC 20044). The underground architecture magazine* **Underground Space**, *listed as $125/year on* **NWEC** *p. 241, is really $40/year from the American Underground Space Association, 221 Church Street S.E., Minneapolis, MN 55455.*

Finally, you may have had trouble seeing the film **El Salvador: Another Vietnam**, *which was not shown commercially in most cities despite Sheila Benson's "must see" praise (***CQ** *Spring 1982). You can rent prints for roughly $50, depending on circumstances; contact the Committee in Solidarity with the People of El Salvador, either locally or at P.O. Box 12056, Washington, DC 20005.*

—Art Kleiner

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That phrase under access information in the **CoEvolution Quarterly** means you can mail order the item from:

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(Required by 39 U.S.C. 3685)

1. TITLE OF PUBLICATION	A. PUBLICATION NO	2. DATE OF FILING
CoEvolution Quarterly	0 7 7 1 5 0	9/9/82
3. FREQUENCY OF ISSUE: quarterly	A. NO. OF ISSUES PUBLISHED ANNUALLY: 4	B. ANNUAL SUBSCRIPTION PRICE: $14.00

4. COMPLETE MAILING ADDRESS OF KNOWN OFFICE OF PUBLICATION *(Street, City, County, State and ZIP Code) (Not printers)*
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5. COMPLETE MAILING ADDRESS OF THE HEADQUARTERS OR GENERAL BUSINESS OFFICES OF THE PUBLISHERS *(Not printers)*
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CoEvolution/POINT Financial Report
Fall 1982

INCOME	Aug, Sept, Oct		
Subscriptions, gifts & renewals	$ 83,495		
Distribution	14,709		
Back issues	2,636		
Retaining & sustaining	2,084		
CQ total	**$102,924**		
Other products (T-shirts, maps, NWEC)	9,174		
Unclassified ads	3,483		
Mailing list rentals	2,164		
Chronicle column	2,400		
Uncommon Courtesy	6,200		
Grand total	**$126,345**		

EXPENSES			
Printing (38,000 copies)	$ 29,793		
Distribution shipping	1,357		
Subscription process & mailing	12,777		
Salaries			
Editorial	13,240		
Production	12,318		
Office	20,908		
Contributors	5,306		
Equipment rental	1,589		
Legal & professional	1,312		
Office & production supplies	4,286		
Postage	3,223		
Promotion & advertising	4,335		
Rent	5,828		
Telephone	1,830		
Utilities	761		
Misc. operating expenses	2,815		
CQ total	**$121,678**	**(net $–18,754)**	
Other products	2,172	(net	7,002)
Unclassified ads	675	(net	2,808)
Mailing list rentals	1,796	(net	368)
Chronicle column	1,081	(net	1,319)
Uncommon Courtesy	11,690	(net	–5,490)
Grand total	**$139,092**		

NET GAIN (OR LOSS) **($12,747)**

POINT Balance Statement
31 October 1982

Assets	
Cash in bank	$ 12,691
Investments	27,309
Accounts receivable	
Distributors	28,180
Mailing list rentals	4,972
Chronicle column	400
Inventory	
Back issues	$ 86,684
Other products	8,121
Random House inventory of NWEC (25,224 @ $3.19 each)	80,465
Liabilities	
Accounts payable	$ -0-
Subscriber liability	270,424
Random House (negative NWEC sales)	153,000

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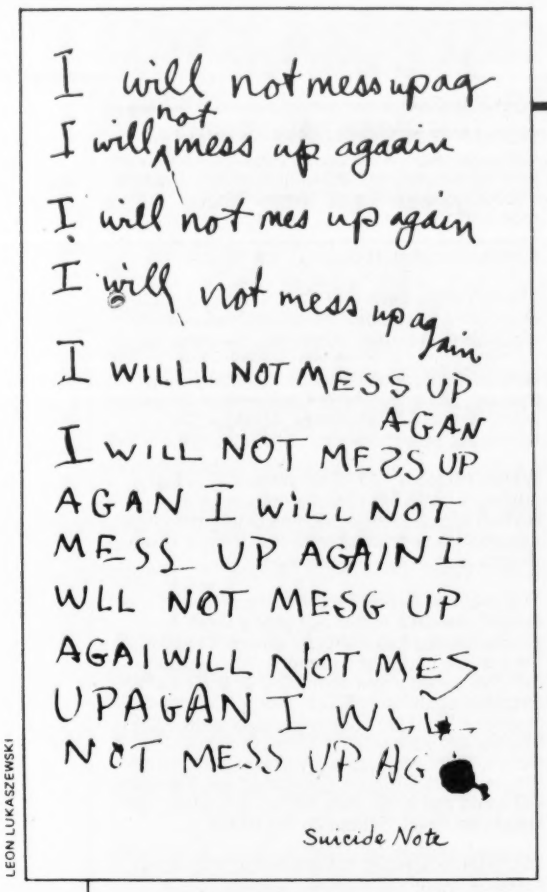

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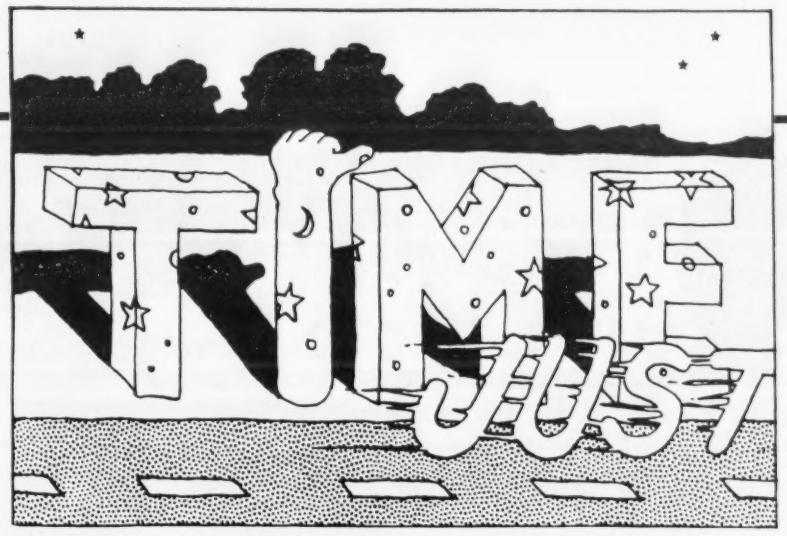

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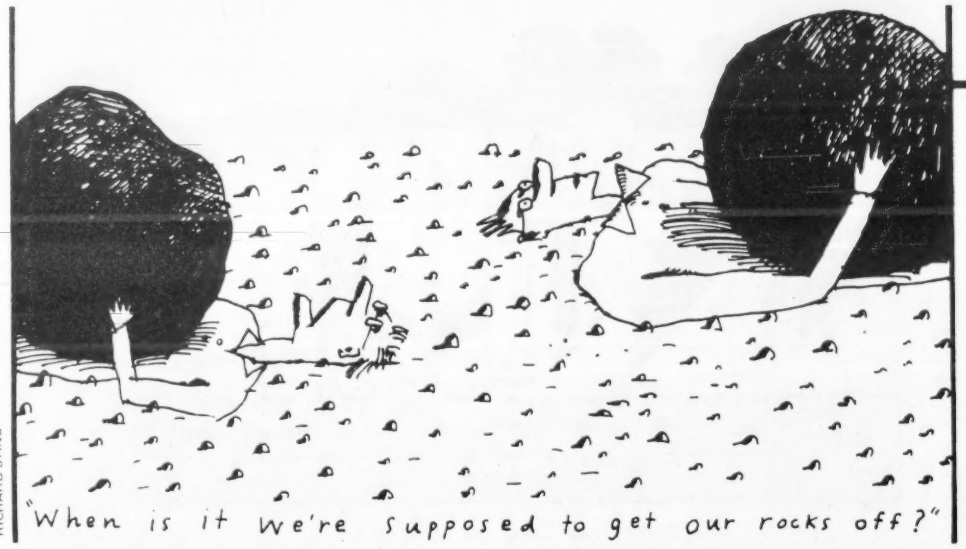

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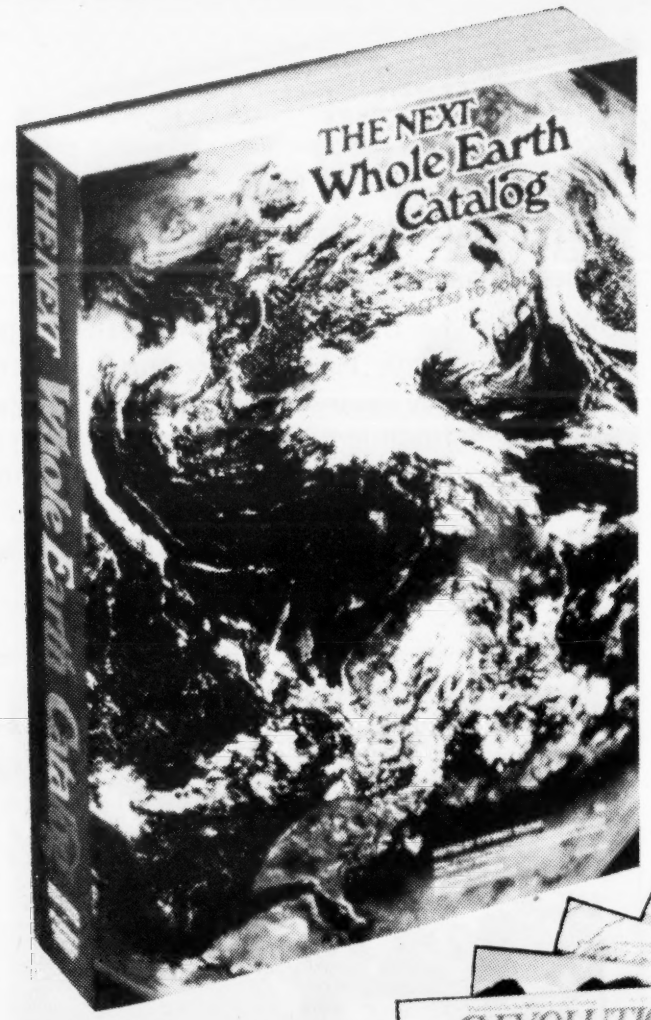

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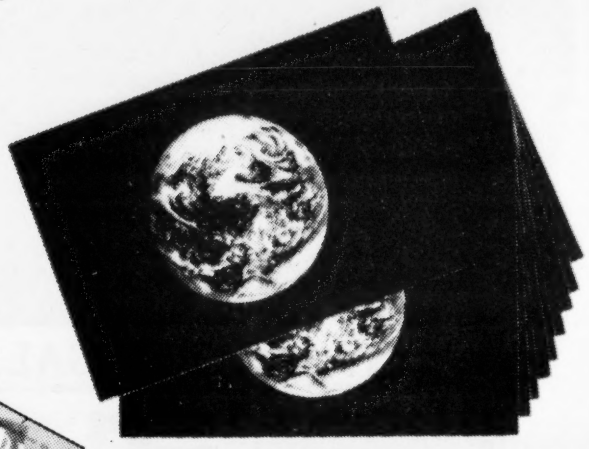

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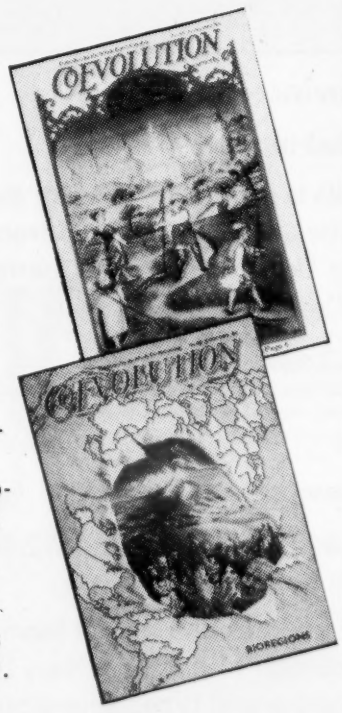
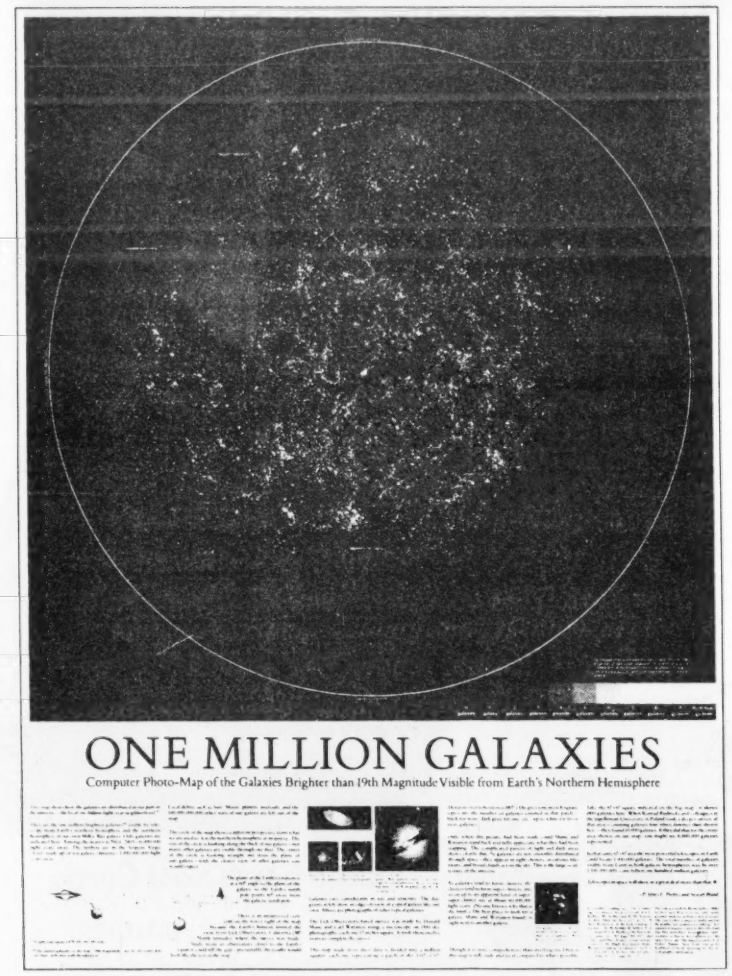


No. 33, Spring 1982. Articles on the nature of gender in our time, including a major piece by Ivan Illich. Also: non-fiction melodrama by Will Baker, Anne Herbert's "Rising Sun Neighborhood Newsletter," "Redefining the Police," and a précis of Paul Hawken (et al.)'s book, **Seven Tomorrows.**

No. 32, Winter 1981. Guest edited by Peter Berg and Stephanie Mills. Bioregions Special. Articles on ecopolitical decentralism in the U.S., Europe, and Africa; a report on the forced relocation of thousands of Hopi and Navajo Indians; a chapter from Murray Bookchin's **Ecology of Freedom**; regional bibliographies; and contributions by Jan Morris, Gary Snyder, Molly Ivins, and Wes Jackson.



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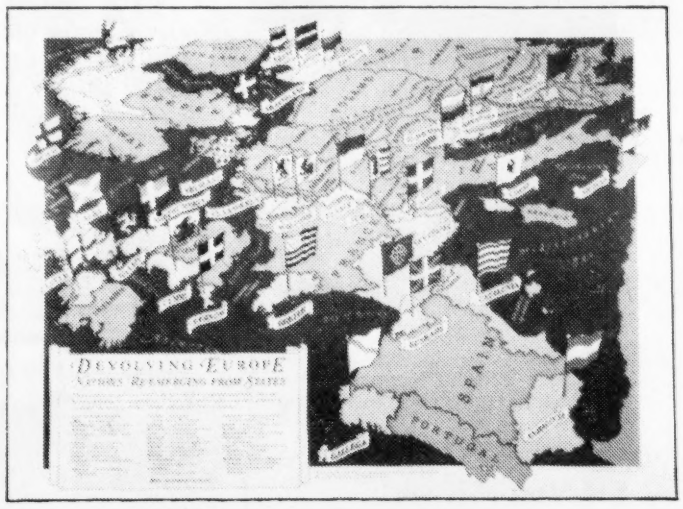

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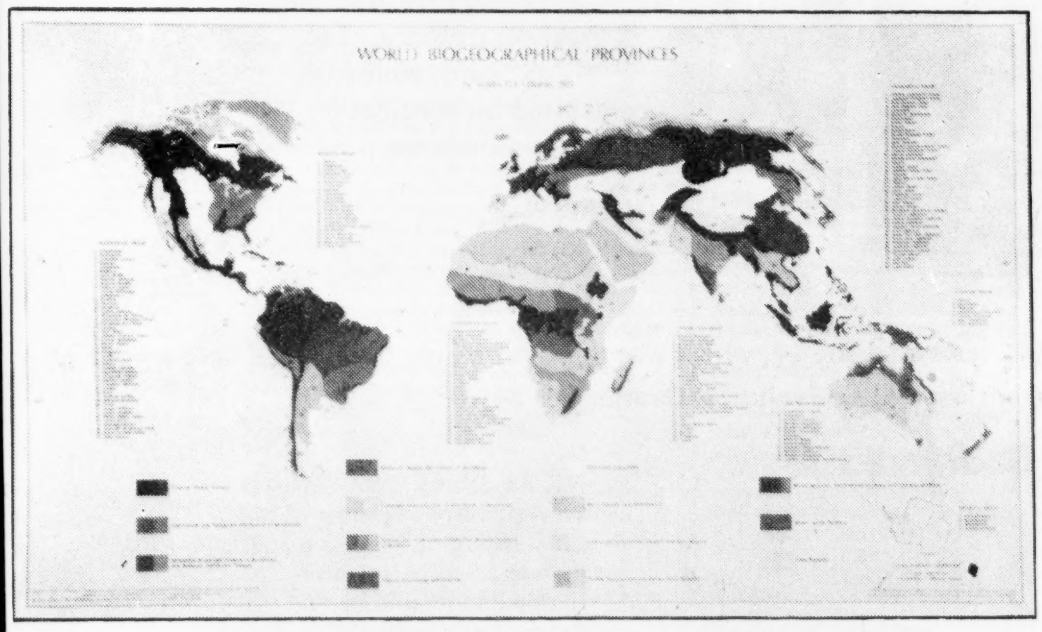

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—*Anne Herbert*

IN THE COMMUNITY regulated only by laws of demands and supply, but protected from open violence, the persons who become RICH are, generally speaking, industrious, resolute, proud, covetous, prompt, methodical, sensible, unimaginative, insensitive, and ignorant. The persons who remain POOR are the entirely foolish, the entirely wise, the idle, the reckless, the humble, the thoughtful, the dull, the imaginative, the sensitive, the well-informed, the improvident, the irregularly and impulsively wicked, the clumsy knave, the open thief, and the entirely merciful, just, and godly person.

—*John Ruskin, 1862*

THE only thing to teach is how to fall in love, what to do then to make it last.

To make it a lifetime thing. To teach how to find out more about the beloved. To build something with the beloved, within the beloved. To teach all this before love ever happens so that when love comes, be it of caterpillars or dead painters or wood and nails or computers that talk back, the feeling doesn't dissipate into a hopeless infatuation—"it must be wonderful to do that, to know about that, but I can't"—but is a release of power like real love that leads to knowing more because you know where to find it, to cherishing and building in this love because you know that someone can tell you how to do it and you keep looking until you find the one who can.

—*Anne Herbert*

The Oak Beams of New College, Oxford

"New College, Oxford, is of rather late foundation, hence the name. It was probably founded around the late 16th century. It has, like other colleges, a great dining hall with big oak beams across the top, yes? These might be eighteen inches square, twenty feet long.

"Some five to ten years ago, so I am told, some busy entomologist went up into the roof of the dining hall with a penknife and poked at the beams and found that they were full of beetles. This was reported to the College Council, who met in some dismay, because where would they get beams of that caliber nowadays?

"One of the Junior Fellows stuck his neck out and suggested that there might be on College lands some oak. These colleges are endowed with pieces of land scattered across the country. So they called in the College Forester, who of course had not been near the college itself for some years, and asked him about oaks.

"And he pulled his forelock and said, 'Well sirs, we was wonderin' when you'd be askin'.'

"Upon further inquiry it was discovered that when the College was founded, a grove of oaks had been planted to replace the beams in the dining hall when they became beetly, because oak beams always become beetly in the end. This plan had been passed down from one Forester to the next for four hundred years. 'You don't cut them oaks. Them's for the College Hall.'

"A nice story. That's the way to run a culture."

—*Gregory Bateson*

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